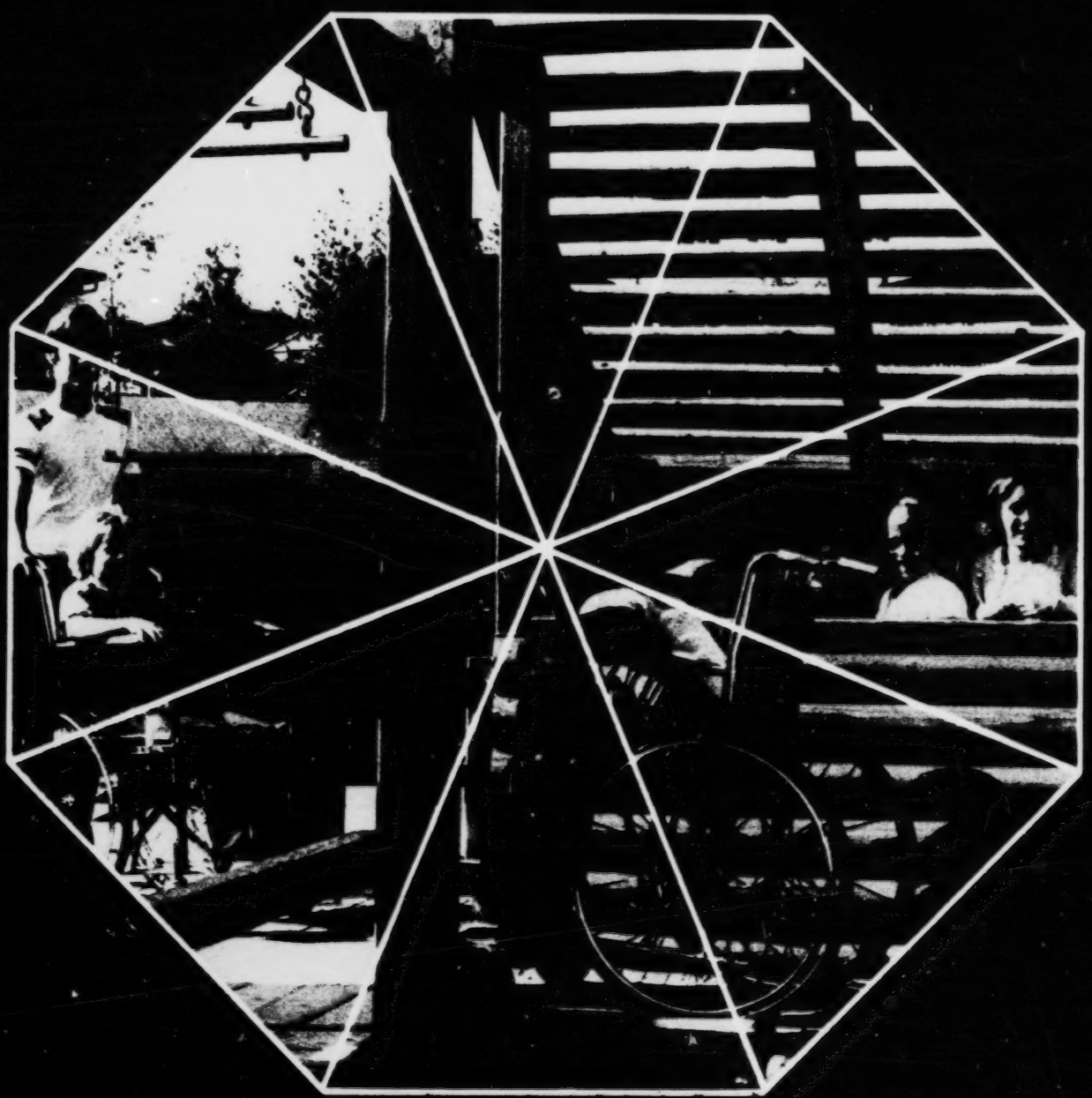
Integrated Play Environments For Children



A Report Prepared for the Recreation Branch of the Ontario
Ministry of Tourism and Recreation by
Paul F. Wilkinson, Ph.D.
Faculty of Environmental Studies
York University
Toronto, Ontario

Represented by
Queen's Printer for Ontario
1982, Toronto, Canada

ACKNOWLEDGEMENTS

A great many people have been instrumental in making this research possible. I would like to express my thanks to all those people and organizations who have been so generous with their time and effort.

A special note of appreciation must be extended to: Phil Pyatt and Bill Knott of the Recreation Branch, Ministry of Tourism and Recreation; Dorothy Wilkinson for her many hours of labour on interviewing, library research, typing, proofreading, data analysis, and advice; and the Faculty of Environmental Studies, York University; Robert K. Alary for his photography.

Finally, thanks are extended to Chris for being such a useful research instrument.

Paul F. Wilkinson, Ph.D.
Associate Professor
Faculty of Environmental Studies
York University
Toronto, Ontario

INDEX

ACKNOWLEDGEMENTS i

INDEX ii

LIST OF FIGURES vi

CHAPTER 1: INTRODUCTION 1
THE ISSUES OF DISABILITY AND INTEGRATION 1
DEFINITIONS: "DISABLED" AND "HANDICAPPED" 4
RESEARCH PROBLEM 5
RESEARCH DESIGN 6

CHAPTER 2: THE CONCEPT OF INTEGRATION 8
NORMALIZATION 8
INTEGRATION 8
FOUR VIEWS OF INTEGRATION 9
(A) JERRY SPINAK 10
(B) CAROL STENSRUD 10
(C) ROXANNE HOWE-MURPHY 13
(D) PEGGY HUTCHISON AND JOHN LORD 16
(E) CONCLUSION 23

CHAPTER 3: PLAY AND THE DISABLED CHILD 26
THE ROLE OF PLAY IN CHILD DEVELOPMENT 26
TYPES OF PLAY 29
THE DISABLED CHILD 31
THE "PLAY VERSUS THERAPY" DILEMMA 33

CHAPTER 4: TYPES OF DISABILITIES AND THEIR IMPLICATIONS FOR PLAY 40
PHYSICAL DISABILITIES 41
(A) SENSORY DISABILITIES 41
(i) Visual Disabilities 42
(ii) Auditory Disabilities 44
(iii) Visual-Auditory Multi-disability 46
(B) ORTHOPEDIC DISABILITIES 46
(i) Amputations 48
(ii) Arthritis 48
(iii) Muscular Dystrophy 49
(iv) Musculoskeletal Disabilities 49
(v) Spina Bifida 50
(vi) Programme and Facility Implications 50
(C) CEREBRAL PALSY 51
(D) OTHER PHYSICAL DISABILITIES 53
(i) Allergies 53
(ii) Asthma 54
(iii) Cardiovascular Disabilities 54

(iv) Cystic Fibrosis 55
(v) Convalesence 55
(vi) Diabetes 56
(vii) Epilepsy 56
MENTAL RETARDATION 57
MENTAL ILLNESS 62
LEARNING DISABILITIES 64
MULTIPLE DISABILITIES 65

CHAPTER 5: BARRIERS TO INTEGRATION 66
INTRODUCTION 66
SOCIETY'S NEGATIVE ATTITUDES TOWARDS DIFFERENTNESS 66
RECREATION AND LEISURE: A LOW PRIORITY 67
RECREATION BEING SEEN AS THERAPY 70
LACK OF SUPPORT SERVICES 71
INADEQUATE LEADERSHIP AND INAPPROPRIATE PROGRAMMES 71
DEAD-END SEGREGATED SERVICES 74
PARENTS 74

CHAPTER 6: THE PROCESS OF DEVELOPMENTAL AND ADAPTIVE PROGRAMMING 76
INTRODUCTION 76
THE UPGRADING PHASE 76
(A) DEVELOPMENTAL PROGRAMMING 76
(B) ADAPTIVE PROGRAMMING 78
THE EDUCATION PHASE 80
(A) EDUCATING CONSUMERS ABOUT LEISURE AND INTEGRATION 80
(B) THE ROLE OF ADVOCATES, CONSUMERS, AND PARENTS IN THE INTEGRATION PROCESS 82
(C) LEADERSHIP TRAINING FOR STAFF AND VOLUNTEERS 83
(D) EDUCATE PUBLIC, PEERS, AND PARTICIPANTS 84
THE PARTICIPATION PHASE 84

CHAPTER 7: STATE-OF-THE-ART IN ONTARIO 87
INTRODUCTION 87
DO THE PLAY NEEDS OF THE DISABLED CHILD VARY SIGNIFICANTLY FROM THOSE OF THE NON-DISABLED CHILD? IF SO, HOW DO THEY VARY? 88
WHAT ARE THE MEANS BY WHICH THESE NEEDS CAN BE MET IN FORMAL PLAY ENVIRONMENTS? IN PARTICULAR, ARE THERE ANY MODIFICATIONS THAT ARE NECESSARY IN ORDER THAT FORMAL PLAY ENVIRONMENTS CAN BE ADAPTED TO MEET THE SPECIAL NEEDS OF THE DISABLED CHILD? 89
(i) Visual Disabilities 90
(ii) Auditory Disabilities 90
(iii) Orthopedic Disabilities 90
(iv) Cerebral Palsy 90
(v) Mental Retardation 90

(vi) Leadership 91
(vii) Selection of Disabled Participants 91
(viii) Facility Design 91
(ix) Transportation 91
(x) Upgrading 91
WHAT ARE THE IMPLICATIONS OF NORMALIZATION AND INTEGRATION OF PLAY ENVIRONMENTS FOR BOTH DISABLED AND NON-DISABLED CHILDREN? 92
(i) Normalization 92
(ii) Integration 93
(iii) Non-Disabled Children 96
HOW CAN THE PLAY NEEDS OF DISABLED AND NON-DISABLED CHILDREN BE MET IN INTEGRATED/NORMALIZED PLAY ENVIRONMENTS? 96
(i) Introduction 97
(ii) Policy 97
(iii) Administrative Support 97
(iv) Parental and Special Agency Support 98
(v) Staff Training and Leadership 99
(vi) Selection and Evaluation Procedures 99
(vii) Financial Support 100
(viii) A Continuum of Developmental Opportunities 101
(ix) Success Through Demonstration 101
WHAT IS THE STATE-OF-THE-ART OF INTEGRATED PLAY ENVIRONMENTS IN ONTARIO? 101
(i) Existing Integrated Play Environments 101
(ii) Staff 103
(iii) Selection and Evaluation of Participants 104
(iv) Inter-Agency and Community Co-ordination 105
(v) Medical, Safety, and Legal Aspects 105
(vi) Future Plans 106
HOW CAN THE VARIOUS INSTITUTIONS INVOLVED WITH INTEGRATION PROVIDE PLAY ENVIRONMENTS THAT ARE BETTER SUITED TO MEETING THE PLAY NEEDS OF BOTH DISABLED AND NON-DISABLED CHILDREN? 107
(i) Introduction 107
(ii) Philosophy of Normalization and Integration 107
(iii) Policy of Normalization and Integration 107
(iv) Education 109
(v) Leadership 110
(vi) Design 111
(vii) Developmental Programming 111
(viii) Evaluation 111
(ix) Financial Support 111

CHAPTER 8: DESIGN GUIDELINES 113
THE GOAL OF PLAY ENVIRONMENT DESIGN 113
DESIGN PRINCIPLES/CRITERIA 113
(a) GARY T. MOORE AND URIEL COHEN 113
(b) LELAND G. SHAW 115
DESIGN OBJECTIVES 118
DESIGN GUIDELINES 120
(a) SITE SELECTION AND LOCATION 121
(i) Size 121
(ii) Micro-Climate 121
(iii) Topography 121
(iv) Access 121
(v) Existing and Complementary Facilities 121
(b) SITE PLANNING 121
(i) Function and Organization 122
(ii) Surfacing 122
(iii) Circulation 122
(iv) Walks, Slopes, Ramps, Handrails 123
(v) Fountains 123
(vi) Entrance 123
(vii) Seating and Observation 124
(viii) Shelter 124
(ix) Washrooms 124
(x) Plant Materials 124
(xi) Maintenance 124
(c) FACILITIES 124
(d) CONCLUSION 125

BIBLIOGRAPHY 126

APPENDIX A: SELECTED DEFINITIONS 139

APPENDIX B: CONTACTS 145

APPENDIX C: QUESTIONNAIRE 149

LIST OF FIGURES

1. Spinak's Model of Normalization 11

2. Stensrud's Sequential Recreation Integration Streams 12

3. Howe-Murphy's Conceptualization of Phases: Humanistic Mainstreaming Continuum 15

4. The Process of Integration 18

5. A Method for the Recreation Integration Process 19

6. Model for Recreation Integration 20

7. Developmental Continuum of Experiences 22

8. Hutchison's Four Play Options 35

9. A Comparison of Shaw's Primary Design Criteria and Moore et al.'s Design Principles 116

CHAPTER 1: INTRODUCTION

> Play is the child's world, and it is through play that the child perfects his skills of infancy and early childhood such as crawling, walking, running, eating and talking. Learning is also enhanced through many of the games and forms of play in which the child participates with other children and with his parents or other adults. Maturation and growth in learning should be concomitant results of involvement in play and social adjustment activities and in groups structured for socialization purposes. (Hayes 1977, p. 73)

THE ISSUES OF DISABILITY AND INTEGRATION

The leisure and recreation delivery system is composed of a variety of agencies: public, quasi-public or voluntary, and private. No one element is more important than the others; rather, there is a need to develop a harmonious balance between the goals and demands of each element. In simple terms, this need can be met though the efficient use of a planning and management process that begins with the setting of goals for each element in the system, followed by the establishement of goals, the development of relevant programmes and facilities, and the constant monitoring of goals and content (Stein and Sessems 1977, p. 28). At present, however, there are few attempts being made to undertake such a co-ordinated process. Nowhere is this failure more evident than in the field of special populations, including the elderly, the poor, women, and the disabled. The particular special population that is the concern of this report is that of disabled children and their access to play environments, especially play environments that are used concurrently by non-disabled children.

Many special or voluntary advocacy agencies (e.g., associations for the blind, deaf, mentally-retarded, physically-disabled) do provide play environments for disabled children, but municipal parks and recreation departments -- the primary public agency providing leisure and recreation opportunities in community settings -- generally do not make programmes and facilities accessible to special populations (Edginton et al. 1978). If it is accepted that the primary goal of providing play environments is to foster individual development -- social, physical, and mental -- then it should be recognized that such development requires environments

which "provide maximal opportunities for engagement" (Gordon 1972, p. 2). The lack of such environments, however, results in the disabled child being doubly "handicapped," first because of the primary disability and second because of the lack of suitable play environments (Ibid.). (Of course, it could also be argued that many non-disabled children are also "handicapped" by poor play environments.)

Witt (1977, p. 3) has noted that

> In Canada, leisure services for the disabled are virtually non-existent in most communities. When available, services seem to be mainly segregated and limited in the types of opportunities available. The amount of service seems to be a function of the level of knowledge of those responsible in a given community concerning the value and purpose of leisure services for the disabled, the degree to which service to disabled individuals is perceived as a community responsibility, and the size of the community.

This pattern appears to be true for Ontario. Haist (1975) has found that many Ontario community recreation personnel are unaware of the value of or their responsibility for providing services for the disabled. Most felt that special associations were responsible for leisure services for the disabled and that the municipal agencies were incapable of dealing adequately with the needs of the disable because of the lack of resources, particularly special information, specially-trained staff, specialized equipment, and special approaches. As Witt (1977) found in his national study, such attitudes were particularly true for small communities. Similar results have been found in studies in the United States (e.g., Andreas 1970; Hayes and Smith 1973; Silson et al. 1970; Thomas 1969; Witt 1974).

It was not until the 1960s and 1970s that special/voluntary associations and the disabled themselves began to express concern over such exclusionary policies (Witt 1977, p. 7). Strong arguments were made that:

(1) the overwhelming majority of disabled individuals live and play in the community rather than in highly-segregated institutions;

(2) the disabled have not been the recipients of their rightful share of community leisure opportunities and experiences; and

(3) integrated services are possible in most cases with only minimal changes in programme, philosophy, structure, facility accessibility, discriminating attitudes, and transportation availability (Stein and Sessoms 1973, pp.

411-412).
Where municipal parks and recreation agencies did provide services for the disabled, they were most frequently segregated. Such exclusionary, segregated philosophies meant one or all of the following for the disabled:

> a) regulations or program descriptions specified that they were not allowed to participate in regular community programs;
> b) discriminatory attitudes on the part of participants and program providers made it clear that disabled people were "allowed" but not "encouraged" to participate;
> c) participation was acceptable if individuals had the necessary social or physical skills (but they usually lacked these skills);
> d) participation was acceptable but transportation problems often prevented individuals from attending programs or architectural problems made entry into or utilization of opportunities difficult. (Witt 1977, p. 13)

As a result, participation by the disabled was possible only in:

(1) special programmes provided by voluntary agencies or service clubs; or

(2) a limited number of community-sponsored leisure experiences, usually of a segregated nature; or

(3) opportunities provided only through individual or family resources (Ibid., p. 14).

From a legal point of view, however, it is apparent that it is the responsibility of community leisure service departments -- usually in the form of parks and recreation agencies -- to

> 1) make as many opportunities available to all citizens as possible on an integrated basis; 2) when financially feasible meet the requests of individuals for 'special' restricted membership services. (Ibid., p. 15)

The implementation of such a responsibility is, however, extremely difficult. It would require not only an extensive reorganization of services to involve a programme of upgrading, educating, and integrating (Hutchison and Lord 1979), but also a systems approach to leisure and recreation services involving co-operation between public, voluntary, and private agencies, for it is apparent that

> ...the municipal authority may not be in a position to offer and support all necessary services, but it can cooperate with other agencies and act as the community ombudsman to make sure that community opportunities are made available. (Witt 1977, p. 36)

The focus of this report, therefore, is on the provision of leisure and recreation opportunities for one particular special population -- disabled children. While there are many types of opportunities that are useful to aid in the development of individual disabled children, play environments are suggested as having a great deal of potential for meeting their developmental needs. This potential is a function not only of the possible benefits to be derived from the play environment itself, but also of the opportunity for disabled children to interact positively with non-disabled children in integrated settings.

DEFINITIONS: "DISABLED" AND "HANDICAPPED"

The term "disabled" will be used in this report in preference to "handicapped," for there is a distinction to be made between the two terms:

> INDIVIDUALS WHO ARE DISABLED refers to individuals who because of impairments are limited or restricted in executing some skills, performing tasks, or performing certain activities, movements or patterns. The disability may be the result of the impairment or defect to a bodily organ or member. Disability usually refers to the sense organs and/or organs of execution such as arms, legs and tongue but may also be due to mental impairment.
>
> INDIVIDUALS WHO ARE HANDICAPPED refers to individuals who because of disabilities are adversely affected psychologically, emotionally, or socially. It reflects an attitude of self-pity and despair or perhaps a realistic assessment of the social or physical barriers imposed by society which magnify an existing disability.
>
> Thus, a disability is a state or condition which may or may not be reversible, and which implies realistic limitations on functioning. A handicap is an artificial condition imposed by the individual himself or society, which tends to expand or magnify unnecessarily the realistic limitations of a disability. In other words, the disabled need not be handicapped. (Witt 1976, p. 5, following Gunn 1975).

It should be noted that "handicapped" appears in many quotations in this report; however, "disabled" is becoming the preferred term.

RESEARCH PROBLEM

The research described here deals with a number of problem areas related to the provision of formal play environments that are suited to the play needs of disabled children and that are capable of being used in an integrated setting with non-disabled children. Before detailing those problems, it is important to note the boundaries for the research:

(1) While it is recognized that there are many types of play environments -- formal, informal, indoor, outdoor, home, institutional, etc. -- this research deals specifically with formal outdoor play environments administered by institutions. The play environments under consideration, therefore, include adventure, creative, and traditional playgrounds, while the range of institutions includes school boards, municipal parks and recreation departments, provincial government agencies, special agencies, and private agencies.

(2) The range of disabilities to be considered includes mental, physical, and emotional problems.

(3) The geographical boundary is the Province of Ontario; an attempt has been made to gather data from various areas in the Province and from a wide range of sizes of municipalities and of institutions.

The problem areas to be considered are as follows:

(1) Do the play needs of the disabled child vary significantly from those of the non-disabled child? If so, how do they vary?

(2) What are the means by which these needs can be met in formal play environments? In particular, are there any modifications that are necessary in order that formal play environments can be adapted to meet the special needs of the disabled child?

(3) What are the implications of normalization and integration of play environments for both disabled and non-disabled children?

(4) How can the play needs of disabled and non-disabled children be met in integrated/normalized play environments?

(5) What is the "state-of-the-art" of integrated play environments in Ontario?

(6) How can the various institutions involved with integration provide play environments that are better-suited

to meeting the play needs of both disabled and non-disabled children?

(7) What guidelines can be provided to institutions, administrators, staff, and parents in order to develop an effective programme for the development of integrated play environments?

RESEARCH DESIGN

The research presented here consisted of a number of steps:

(1) A literature review was undertaken in the fields of play, disabilities, therapeutic recreation, community recreation, integration, and normalization.

(2) Based on the literature review, a set of research questions was formulated as the basis for a questionnaire to be administered to institutions in Ontario dealing with disabilities and play environments.

(3) An original objective of the research was to create an inventory of institutions in Ontario with existing integrated facilities and programmes. This proved impossible, for several reasons: conceptions of the notion of integration varied greatly, resulting in many programmes that were termed "integrated" by respondents being judged by the researchers not to be consistent with the basic meaning of the term; many programmes were exploratory, pilot projects with no firm commitment to the future; very few, truly-integrated programmes do exist; and high rates of staff turn-over result in little guarantee of continuity. To explicitly identify a list of integrated programmes might result in their receiving levels of inquiry which they are not prepared to handle. The list of persons and institutions that were contacted is to be found in Appendix B.

(4) A questionnaire was designed, pre-tested, and administered to approximately 65 persons involved in various capacities with institutions in Ontario dealing with disabilities and play environments. These institutions included school boards, municipal parks and recreation departments, government agencies, hospitals and other special care facilities, and private agencies (e.g., day-care centres and nurseries). The purposes of the interviews were: (a) to identify examples of integrated play environments; (b) to examine the attitudes and levels of knowledge concerning integration among personnel dealing with children, both disabled and non-disabled; (c) to examine the areas of success and difficulty with existing integrated play environments; and (d) to discover the underlying reasons why other institutions are not involved in integrated play. The interviews were

conducted by telephone and lasted between one and three hours. Respondents were selected based on an initial list of agencies dealing with the disabled provided by the Ontario Ministry of Culture and Recreation, supplemented by a networking process in which respondents were asked to suggest other potential respondents. The following general topics were raised: (a) policy on play, integration, normalization, staff training, etc.; (b) nature of (integrated) play environments provided; (c) design, construction, and safety considerations; (d) provision of consultation services (play, disabilities, architecture, landscape architecture, etc.); (e) education/information systems (staff, parents, disabled and non-disabled children, community); (f) evaluation techniques and processes; (g) description of existing facilities and programmes, along with future plans; and (h), in those cases where integration is not occurring or is limited, the barriers and constraints to beginning or increasing integration.

(5) Site visits were conducted to ten institutions with integrated play environments to meet in person with personnel, to observe the play environments, and to discuss in some depth issues raised in the interviews. Sites were chosen for a variety of reasons, including particularly innovative programming or facilities, degree of integration, type of disability, cooperation with other agencies, and evaluation techniques and processes.

(6) The final step involved a synthesis and analysis of the available information and the preparation of this report.

A caveat is in order at this point. Of necessity, this report is a qualitative one, with no presentation of quantitative data or statistical analysis based on the questionnaire results, for the following reason. While each interview was conducted with one individual and hence represents the opinions of one person, that individual was speaking as a representative of an institution; therefore, the "unit of analysis" of the research was the institution and not the individual. The great variety -- in terms of size, purpose, structure, location, etc. -- of institutions involved in the study makes comparability between and among institutions impossible from a statistical point of view. For example, the opinion on a particular topic of a staff member from a large municipality which has a small integrated programme is of questionable comparability in a direct statistical sense with that of a staff member from a small municipality or a special care agency which has a large integrated programme. Only patterns and trends, therefore, will be presented, with no attempt being made to identify particular respondents.

CHAPTER 2: THE CONCEPT OF INTEGRATION

NORMALIZATION

The original definition of "normalization" by Bank-Mikkelsen, the head of the Mental Retardation Services of Denmark, was stated as "letting the mentally retarded obtain an existence as close to the normal as possible" (Wolfensberger 1972, p. 27). Wolfensberger (1972, p. 28) has broadened the definition to give the principle a broader applicability to all human management services:

> Utilization of means which are as culturally normative as possible, in order to establish and/or maintain interpretations, personal behaviours and characteristics which are as culturally normative as possible.

He argues that the phrase "culturally normative as possible" makes the concept universally-applicable in that the term refers to situations which are statistically typical or conventional for the culture being considered. He also argues that the term can be considered neutral as it does not infer that a person should or should not be normalized.

INTEGRATION

If Wolfensberger's concept of normalization is accepted, then its major collorary -- integration -- should also be accepted, for integration is the main process for achieving and acknowledging social acceptance and for accomplishing behaviour change. Wolfensberger (1972, pp. 47-48) defined integration

> ...as being the opposite of segregation; and the process of integration (consists) of those practices and measures which maximize a person's (potential) participation in the mainstream of his culture.

There have been many years of experience with integration in school and recreation settings. Hutchison and Lord (1979, p. 33) summarize the results of studies on integration in schools:

(1) integration seems to be most effective with very young children;

(2) integration results in a positive effect on the

attitudes of non-disabled children toward their peers who are disabled;

(3) the use of non-disabled peers as role models and tutors is one of the most effective integration strategies;

(4) the attitudes, understanding, and acceptance by teachers and principals are critical components for successful integration;

(5) frequent in-service training and education concerning the disabled is necessary for teachers.

They (1979, pp. 36-37) go on to summarize the basic conclusions from studies on recreation:

(1) many community recreation agencies offer neither segregated nor integrated programmes for the disabled (Berryman 1971; Witt 1974);

(2) many such agencies are increasingly willing to involve the disabled, but feel they need assistance with facilitating integration;

(3) community agencies committed to serving the disabled often have a staff person designated to facilitate involvement, provide training for volunteers, and include participants in planning;

(4) physical integration (i.e., the disabled using the same building as the non-disabled) is often a useful first step to social integration (i.e., the disabled participating with the non-disabled);

(5) successful social integration has usually involved co-operation between a community agency and one or more voluntary advocacy agencies (which frequently provide education for staff, transportation, and other support services);

(6) there is a growing trend for integrated summer camping, both day and residential; such programmes are usually extremely successful;

(7) highly competitive and structured programmes are less successful because they accentuate differences and skills;

(8) there have been varying degrees of success with integration in recreation settings;

(9) little attention has been paid to the more severely-disabled.

It can be concluded, therefore, that recreation activities in general and children's play environments in particular provide a great deal of potential to be excellent vehicles for the integration of the disabled into society. The concept of integration has undergone considerable refinement in the field of recreation since first being defined. Four views of integration will now be described.

FOUR VIEWS OF INTEGRATION

(A) JERRY SPINAK

In one of the first models of integration of disabled persons into recreation, Spinak (1975) sees recreation in the community as consisting of "stepping stones" for the disabled. (See Figure 1.) The "stepping stones" consist of: the institutional setting; recreation programmes "for" the disabled in society; recreation programmes "with" the disabled in society; and integrated programmes in the normalized area of society. The long-term objective of integration is the gradual phasing out of many of the special programmes in order that the disabled individual is truly integrated into normalized society. Not all individuals will, however, be able to fit into the normalization process; thus, the need for special programs will diminish, but not disappear. Each box in Figure 1 represents a step towards further integration and independence along a continuing path of increased normalization for the formerly institutionalized individual.

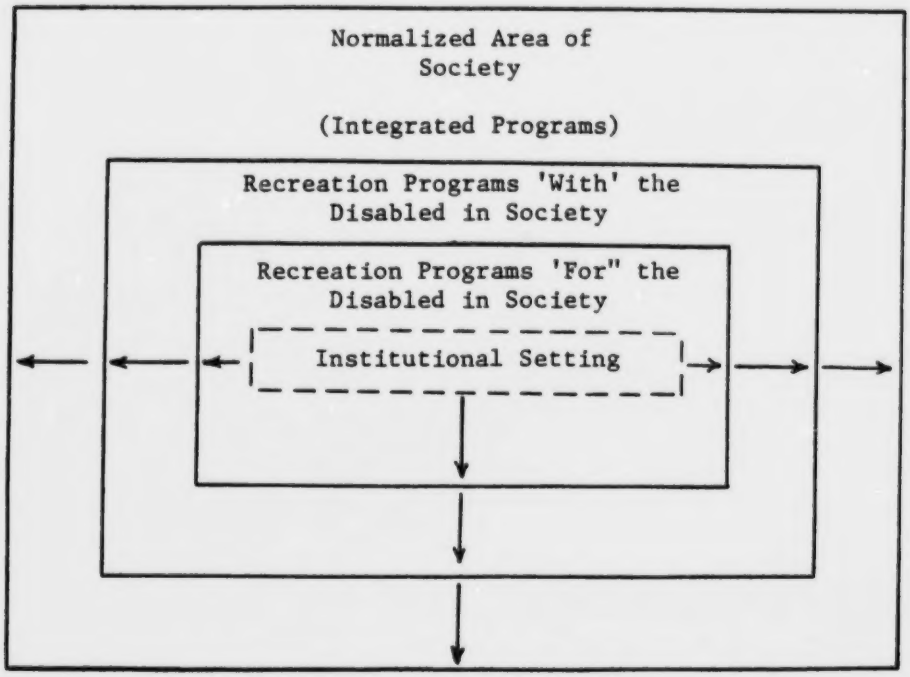
Spinak's model is a useful first step in explaining the process and goal of integration, but gives little indication of how to operationalize it.

(B) CAROL STENSRUD

Building on Spinak's stepping stones process, Stensrud (1978, p. 28) states that integration is a developmental process which "should follow a step by step plan of transition from institution or protective setting to a non-sheltered community setting through the process of sequential integration scheme or streams." Each individual should have the opportunity to engage in activities which are age-, culture-, and skill-appropriate and are consistent with the present level of social, emotional, physical, and cognitive ability of the individual. As these abilities increase, the individual moves to the next higher level of the integration process. The ultimate goal is for the individual to be able to respond independently to his/her leisure needs and engage in community-based leisure experiences. She calls this model "sequential recreation integration schemes." (See Figure 2.)

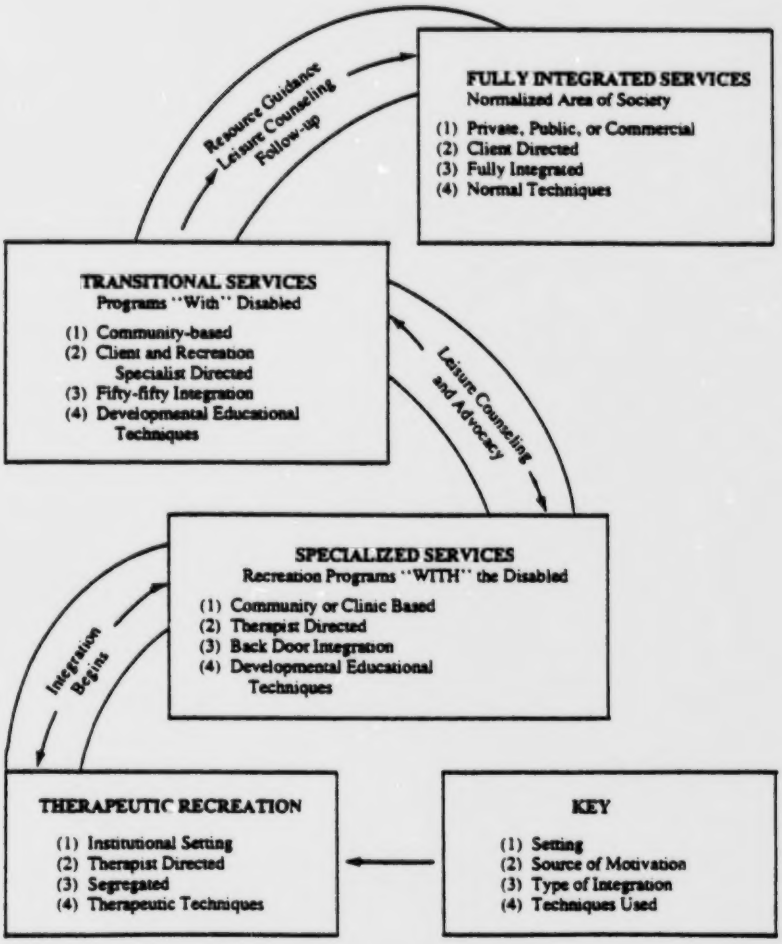
The model involves three stages: (1) segregated or specialized services; (2) transitional services; and (3) fully integrated or normative services. Individuals may enter the stream at the level most suitable to their developmental stage

FIGURE 1: Spinak's Model of Normalization



Source: Spinak (1975)

FIGURE 2: Stensrud's Sequential Recreation Integration Schemes



Source: Stensrud (1978)

and progress through the scheme at a rate based on their own personal growth.

Specialized or segregated services are intended for individuals who are unable to participate in integrated programmes because of inadequate social or recreational skills. Social integration is achieved by what Stensrud calls the "back door" integration process, that is, an informal process which operates outside or in the absence of formal policy. Individuals, staff, and volunteers (chosen because of their ability to assist in the development of social and leisure skills) are merged into the segregated population.

Transitional services provide opportunities for those with basic socialization and leisure skills to have the opportunity to engage in activities with assurance that their special needs will be recognized by staff and that adaptations may be made to make the activity more accessible and enjoyable. The services provided at this stage include leisure counselling, education, planning, and socialization skills, exploration of leisure alternatives, and planned involvement in on-going community activities. Staff members, as advocates, help small groups to attend and explore community activities which are age- and interest-appropriate. Volunteers, who may be equal in number to the disabled, provide support and needed role models; they facilitate interaction among other community members. Stensrud calls this stage the "fifty-fifty" or "front door" integration process.

With fully-integrated services, individuals participate in normal recreation services and are provided supports (e.g., interpreters, buddy-systems, adaptive devices) if necessary. Leisure counselling is continued in order to insure that the individual is sustained at the normative stage.

Stensrud feels that the implementation of sequential recreation integration streams within the community is crucial for the development of humanistic services for those who have been segregated and denied normal services. They provide opportunities for individuals to flow back into the community with assurance that their leisure needs will be met in the most independent and normative manner possible. It is the professional recreationist's responsibility to make these streams available and accessible to every individual.

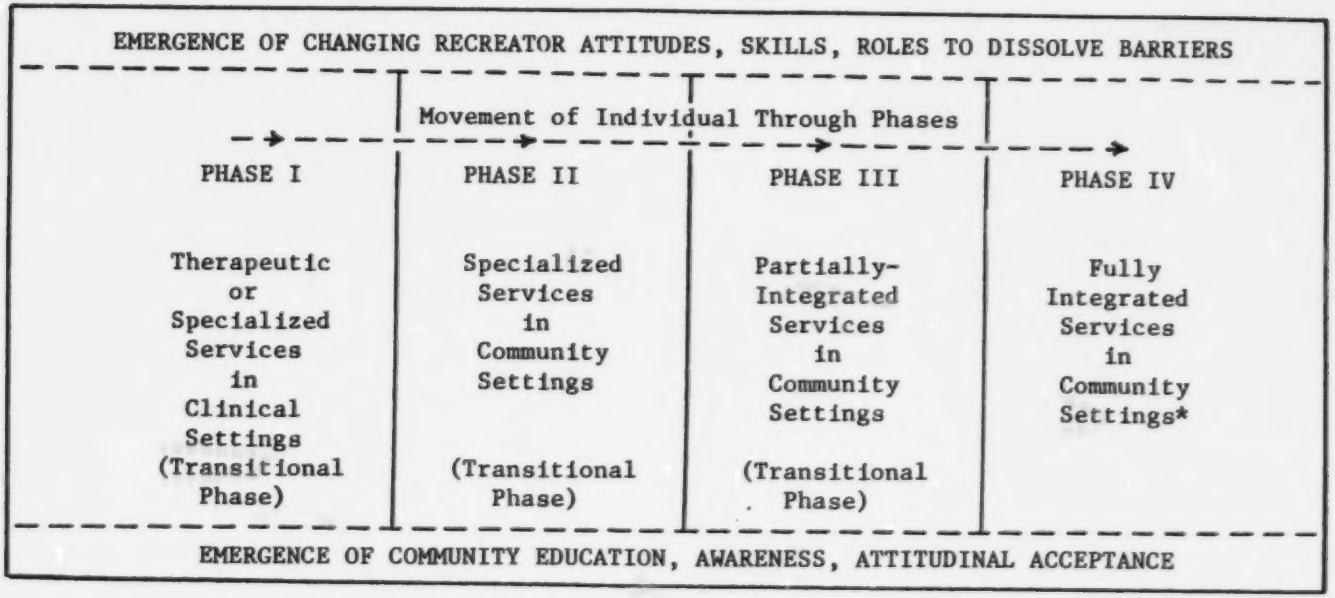
(C) ROXANNE HOWE-MURPHY

Howe-Murphy (1979) contends that the principle of normalization places the primary responsibility to change -- to become more acceptable to society -- on the disabled person. It is not sufficient, however, to assume that cultural and social values can be broadened to include individuals having divergent views. The responsibility for change must, therefore, be placed not only on disabled individuals, but also on society to become more accepting of a wide range of values and behaviours. (See Figure 3.)

Howe-Murphy (1979, p. 13) suggests that a fundamental consideration for humanism should be the basis for integration (or "mainstreaming," as it is often termed in the United States):

> Humanism reflects a central concern for the dignity and worth of (humans) and the development of human potentialities. It asserts that the fundamental consideration for human beings is that the individual should have a measure of autonomy, choice, and self-determination.
>
> Thus, integration is a two-fold process, providing the support services necessary at any point in time to (a) maximize individual ability and (b) minimize the effects of the disability and the physical, social, and cultural barriers. This perspective emphasizes the entire human service delivery system, changing the focus from integrating the person to integrating the system. A full range of services from totally-segregated to fully-integrated ones needs to be developed in order to provide a continuum of services suited to individuals at particular levels of preparedness. The continuum suggested here is more extensive than those proposed by Spinak or Stensrud. Of the four phases, the first three emphasize the transition from segregated to integrated settings. Each phase encourages the attainment of maximum independent leisure satisfaction in settings of individual choice and makes an effort to provide skills and behaviors that can be transferred to normalized settings.
>
> Phase I provides a safe learning environment in order to help the individual attain the skills necessary to function successfully in society. Phase II is a community-based setting to provide opportunities for transition to Phase III, which is the first opportunity for partially-integrated services. The quality of the interactions could

FIGURE 3: Howe-Murphy's Conceptualization of Phases: Humanistic Mainstreaming Continuum


EMERGENCE OF CHANGING RECREATOR ATTITUDES, SKILLS, ROLES TO DISSOLVE BARRIERS
Movement of Individual Through Phases
PHASE I
Therapeutic or Specialized Services in Clinical Settings (Transitional Phase)
PHASE II
Specialized Services in Community Settings
(Transitional Phase)
PHASE III
Partially-Integrated Services in Community Settings
(Transitional Phase)
PHASE IV
Fully Integrated Services in Community Settings*
EMERGENCE OF COMMUNITY EDUCATION, AWARENESS, ATTITUDINAL ACCEPTANCE

* Phase IV implies full participation in settings of one's choice regardless of the presence or absence of disability.

Source: Howe-Murphy (1979)

> affect long-term attitudes; therefore, it is the responsibility of the individual to manipulate the environment in order to encourage positive interaction. Finally, in Phase IV no major barriers to integration exist. While this continuum focusses on a range of services, it must of necessity address the dissolution of barriers that prevent the participation of individuals in desired settings. It is the responsibility of recreation professionals and other service providers to counteract the barriers that restrict the transition of individuals to integrated settings.

Howe-Murphy emphasizes social integration, that is, the interdependence and interaction of disabled and non-disabled persons as elements of a larger societal system. Numerous social psychologists support the point that opportunities for frequent social contact and interaction encourage attitudinal acceptance. The environment most supportive of positive acceptance includes: (a) informal interaction, (b) particpation rather than therapy, and (c) emphasis on improving self-concept. It is the role of the professional recreationist to recognize the ecology of the total environment and to be aware of the interaction of each variable with other variables and with the success of the entire effort.

Another important factor in determining the success of integration is the staff and their attitudes, skills, and knowledge. The role of the therapeutic recreationist changes from programme operation to the provision of staff in-service training programmes, consultation, public education, and advocacy.

Howe-Murpy (1979, p. 17) concludes:

> In critically analysing this perspective of mainstreaming, it becomes apparent that the humanistic philosophy applies not only to disabled persons, but to all individuals. In recognizing individual interests, values, concerns, and needs, the continuum reflects a range of options that promote the independence and well-being of all individuals, by maximizing potentials and minimizing barriers.

(D) PEGGY HUTCHISON AND JOHN LORD

Hutchison and Lord (1979) see integration as a community

development process which reflects a struggle to change the quality of people's lives. They promote the use of three action strategies to make broad value and structural changes which will facilitate the implementation of the integration process:

(1) social planning is the use of professional planners to try to determine people's real needs; this is in contrast to past practices involving little public participation in which goals and solutions were usually defined within the confines of existing values and institutions;

(2) community development is citizen-initiated action which focusses on public involvement and the potential of "self-help," but, unfortunately, there is often the naive assumption that those in power will respond and work with community groups in achieving consensus; the process of community development -- in which process may be as important as outcome -- is an important element in building community support for integration;

(3) social action is the use of conflict, confrontation, pressure, and negotiation to change relationships in the power structure.

The mix of strategies to be used in a particular situation is a function of the unique characteristics of the problem at hand. The basic theme, however, is that this approach is an activist or interventionist one designed to change in a fundamental way the manner in which society treats disabled persons.

Hutchison and Lord describe integration in terms of the dialectical model presented in Figure 4. Their process of integration consists of nine over-lapping phases, as described in Figure 5. The model which they suggest for the implementation of the integration process consists of three essential components: upgrade, educate, and participate. (See Figure 6.)

The focus of UPGRADING should be not just the individual, but also the entire social system, for "If we fail to recognize the connection between the individual and the social system, individual upgrading may do little to change the lives of persons who have disabilities" (Ibid., p. 51). As a result, a number of guidelines are suggested for the development of segregated upgrading programmes based on normalization:

(1) the setting selected for an upgrading experience will determine if there is potential for social integration;

(2) if a name is essential for a leisure experience or programme, it should be as non-stigmatizing as possible;

(3) small groups of people in segregated experiences minimize the deviancy image;

Figure 4: THE PROCESS OF INTEGRATION

INTEGRATION IS	INTEGRATION IS NOT
-- a process	-- an end-product
-- participation in and enjoyment of experiences	-- being forced into impossible competition
-- opportunities to upgrade skills	-- being denied appropriate special services
-- individual choice	-- just disabled people
-- providing supports and changing or adding services where necessary	-- only using existing services
-- community support for changes in attitudes and policies	-- denying the right of all people to have dignity, self-confidence, and community involvement

After: Hutchison and Lord (1979)

Figure 5: A METHOD FOR THE RECREATION INTEGRATION PROCESS

(1) A small group of individuals identifies issues related to community involvement, leisure services, and the disabled.

(2) An ideology is developed based on human needs, beliefs, and values, and the principles of integration and people as developing human beings.

(3) Interest in integration as a viable alternative gains momentum as others are contacted for support.

(4) Community needs and interests are carefully assessed through meetings with consumers, parents, advocates, and recreation personnel. A sense of any resistance to change should be determined.

(5) A plan for implementing integration is developed.

(6) Community human, physical, and financial resources are studied to determine how they can best be used for involvement of disabled persons.

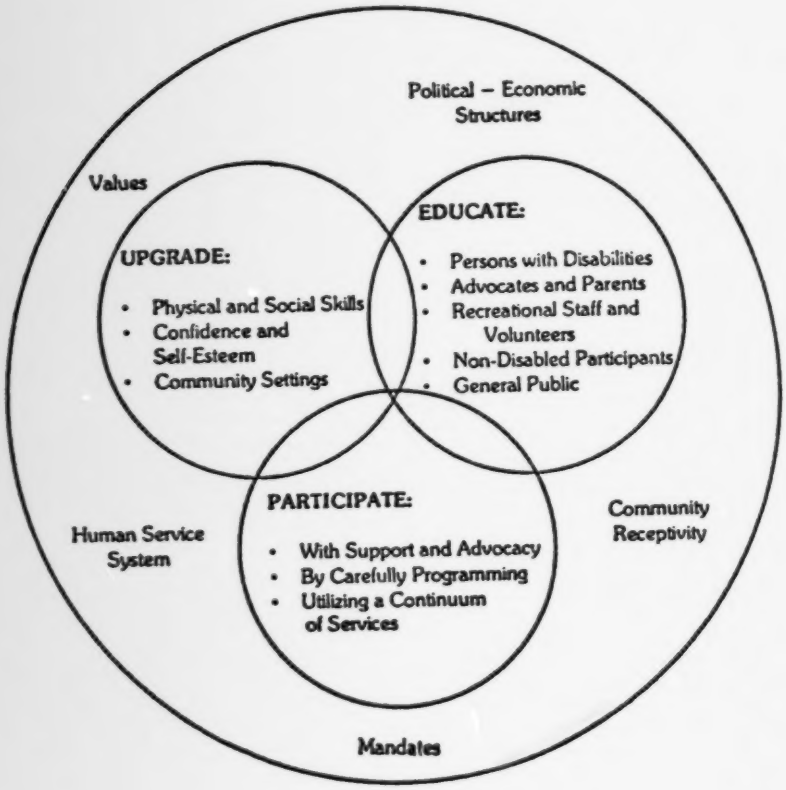
(7) Objectives and strategies based on the assessment of needs and resources are determined.

(8) Educate and support changed awareness and behaviour.

(9) Evaluate, re-assess, and extend commitments.

After: Hutchison and Lord (1979, pp. 42-43)

FIGURE 6: Model for Recreation Integration



Source: Hutchison and Lord (1979)

(4) transfer of skills to integrated settings is increased when meaningful generalizations are developed rather than specific skills; and

(5) building self-confidence and developing self-awareness facilitate integration.

Pomeroy's (1974, p. 95) comment on the upgrading process is of particular importance:

> Care must be taken that the handicapped child moves gradually and at his own pace. Some children may need to move back and forth for a long period of time between special programs and integrated programs before they are able to make a complete transition and participate entirely with the nonhandicapped. Some may never make the transition. Nonhandicapped children taking part in integrated programs must be guided and closely supervised, as their tendency is to help the handicapped too much. Handicapped children should not be allowed to be the centre of attention because they happen to be using crutches or wheel chairs.

The purpose of the EDUCATION phase of the process can be divided into four areas:

(1) to educate consumers about leisure and recreation;

(2) to educate advocates, consumers, and parents regarding their role in the integration process;

(3) to provide leadership training and in-service education for staff and volunteers who are responsible for segregated and generic leisure services; and

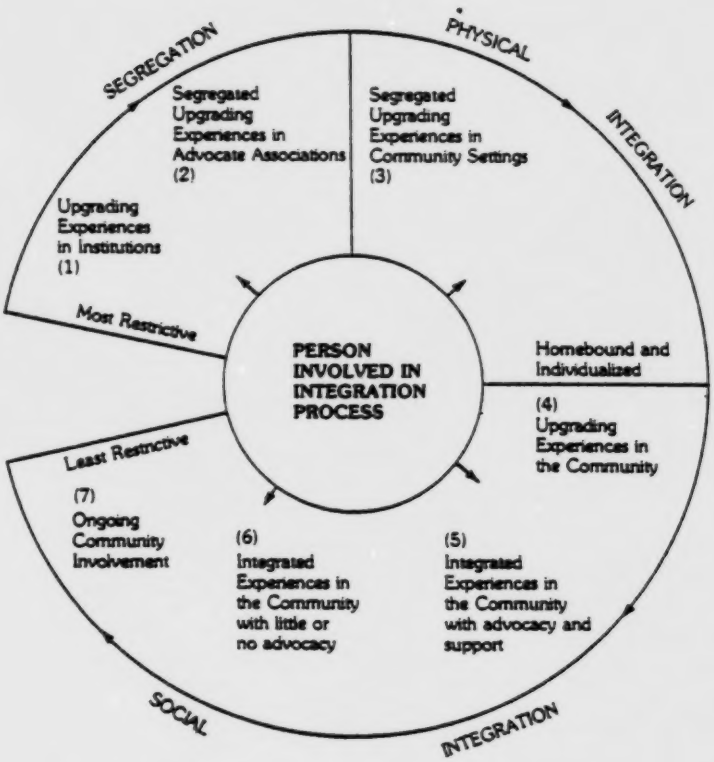
(4) to educate other participants, peers, and the public regarding the benefits of the integration process.

It is important to emphasize that most of the education of the public and the participants will occur during integrated experiences.

The PARTICIPATION phase of the model has been developed into an extensive, detailed continuum of services and experiences. (See Figure 7.) Hutchison and Lord feel that many community experiences have the potential to become integrated opportunities; however, there is a lack of awareness of integration as a process. When staff and volunteers of generic leisure agencies understand how their services can be part of a developmental continuum of services, they can begin to co-operate with institutions and voluntary advocate associations in their community. The following principles were suggested as a guide for community groups who wish to facilitate integration:

(1) involve consumers, parents, advocates, and community

FIGURE 7: Developmental Continuum of Experiences


SEGREGATION
PHYSICAL
INTEGRATION
SOCIAL
INTEGRATION
Segregated Upgrading Experiences in Advocate Associations (2)
Segregated Upgrading Experiences in Community Settings (3)
Upgrading Experiences in Institutions (1)
Most Restrictive
PERSON INVOLVED IN INTEGRATION PROCESS
Homebound and Individualized
(4) Upgrading Experiences in the Community
Least Restrictive
(7) Ongoing Community Involvement
(6) Integrated Experiences in the Community with little or no advocacy
(5) Integrated Experiences in the Community with advocacy and support

Source: Hutchison and Lord (1979)

activists;

(2) base the integration plan on strong ideology and values;

(3) co-ordination is central to the concept of a comprehensive integration plan; and

(4) change mandates of leisure agencies in order to develop comprehensive support services.

(E) CONCLUSION

When considered in chronological order, the above four theories of integration demonstrate expansion and development, beginning with Spinak's attempt to provide the disabled with the skills necessary to move into society and ending with Hutchison and Lord's complex theory of comprehensive leisure opportunities for all people (Seabourn 1981b). The earlier theories tend to concentrate on changing disabled persons so that they will be more acceptable to society, a view which is consistent with Wolfensberger's emphasis on directing a more conscious effort at shaping skills that are socially-normative. Howe-Murphy builds on this view by asserting that the effects of disability and the physical, social, and cultural barriers to integration should be minimized. Finally, Hutchison and Lord develop this through a focus on community development as a process.

Each of the theories begins with physical integration, recognizing the importance of the use of community facilities and services as an initial step. These activities are segregated, skill-upgrading programmes which should follow various guidelines, including a component which would increase the potential for future normalization. Wolfensberger states that integration is only meaningful, however, if it is social integration (i.e., if it involves social interaction and acceptance), for physical integration is only a precondition and not a guarantee for social integration. The success of social integration depends on four factors:

(1) programme features affecting social interactions;

(2) the labels that are given to services and facilities;

(3) the labels and terms applied to the clients; and

(4) the way in which the service building is perceived.

Each of the theories addresses these factors in various degrees, but all concentrate on programme features which affect social interaction. These features include group size, staff, informality, competitiveness, environment, and support services. All of the theories stress that the most important feature is a gradual process of integration, using such terms as "back door," "fifty-fifty," and "reverse" integration.

Wolfensberger notes that a number of mechanisms can be used to protect and maintain normalization in a community: regulatory controls or standards for agencies, written agreements on programme quality, funding tied to performance, consumer representations, citizen advocacy, watchdog (monitoring) committees, placement of specialists as consultants in generic agencies, and back-up specialty services. While all four theories mention at least citizen advocacy and consultants for generic agencies, Hutchison and Lord's theory incorporates the largest number of safeguards: consumer representation, citizen advocacy, consultants, and watchdog committees.

All four theories adhere to Wolfensberger's basic ideas, but those of Howe-Murphy and of Hutchison and Lord go much further by including strategies for changing the system and the community as a whole. They seem to agree with Wolfensberger's (1972, p. 48) statement that

> For a (deviant) person, integration is achieved when he lives in a culturally normative setting in ordinary community housing, can move and communicate in ways typical for his age, and is able to utilize, in typical ways, typical community resources: developmental, societal, recreational, and religious facilities; hospitals and clinics; the post office; stores and restaurants; job placements and so on.

Seabourn (1981b, pp. 16-18) summarizes the basic similarities and differences of the four theories:

(1) Each theory involves a continuum of services ranging from institutionalized or segregated to fully-integrated services. This continuum should attempt to consider all levels of capability, age ranges, leisure needs, and interests. Disabled persons should enter the continuum at their own level and move at their own rate of growth towards a more integrated experience.

(2) Each theory recognizes the continuing need for segregated services in order to provide for skill development and increased self-confidence.

(3) Each theory emphasizes that programmes must be age-, interest-, and culture-appropriate.

(4) Each theory includes support systems (e.g., buddy systems, interpreters, leisure counselling).

(5) Each theory includes acceptance by society as an integral component of the process; positive, social contact between disabled and non-disabled individuals is the most successful method for gaining social acceptance of the disabled.

(6) Over time, each new theory has become more extensive and complex.

(7) The theories of Howe-Murphy and of Hutchison and Lord stress the concept of humanism more than the others.

(8) Hutchison and Lord stress consumer involvement and representation.

(9) Stensrud and Howe-Murphy place the responsibility for development of the integration continuum with the professional recreationist. Spinak speaks of co-operation and suggests that it is the fault of the recreationist that integration has not progressed. Finally, Hutchison and Lord stress co-operation through the use of community committees consisting of consumers, advocates, and community activists.

It is apparent, therefore, that Hutchison and Lord's theory is the most complete and the one most capable of implementation because it does provide a process of involvement, planning, implementation, and assessment. This process overcomes the criticism that many studies on the disabled do not have a consistent philosophy or ideology underlying their recommendations and do not address the issues of how to design, plan, and implement the conceptual models proposed; for example, see Roeher et al.'s (1974) criticism of Witt's (1974) study of the national status of recreation for the disabled in Canada. It should be noted, however, that in attempting to implement an integration process in a community the character of both the community and the group initiating it are important factors in choosing the model most like to succeed. Whatever model is chosen, the individuals involved must be patient, as the process can take a considerable amount of time. For example, the experience of one community has been that "...over a ten year period of time, it is felt the general public now has a passive acceptance of the special programs throughout the city" (Burdett and Miller 1979, p. 45).

CHAPTER 3: PLAY AND THE DISABLED CHILD

> The child shall have full opportunity for play and recreation....(S)ociety and the public authorities shall endeavour to promote the enjoyment of the right. (United Nations Declaration of the Rights of the Child)

> To have freedom of choice in selecting both structured and unstructured play experiences, to have access to stimulating and creative play environments, and to have competent play leadership are the rights of every child. (Natonal Task Force on Children's Play (1977) of Canada)

THE ROLE OF PLAY IN CHILD DEVELOPMENT

Many definitions of play exist, but the one that will be used here is as follows:

> ...play is the freely chosen activity of children; while from the point of view of adults play is a means and may serve several developmental functions, play is undertaken by children as an end unto itself. Play is what children want it to be; therefore, it manifests itself in a variety of forms, including arts and crafts, games, co-operative and solitary behaviour, reading, imitation, fantasy, sports and so on. The "equipment required" for play ranges from such simple, common-place items as water, sand, sticks, stones, and food to animals and trees to elaborate, self-built forts and houses constructed out of scrap materials. (Wilkinson 1980, pp. 19-20)

Weininger (1980, pp. 45-46) emphasizes the importance of play as follows:

> Play, then is an integral part of the child's being. It is the business of childhood and it has a unique and vital role in the whole educational process....(P)lay to children is growth, since only through play can they take on, absorb and assimilate experience -- physical, social or intellectual -- in meaningful ways. It is through play that they grow, and the growth in turn acts as a stimulus to change through play, which is learning. The relationship is

> a reciprocal, totally integrated one: playing and growing -- growing and playing.

The nature and importance of play is described by Caplan and Caplan (1973, pp. xii-xvii, passim) in a series of rather succinct statements:

> We believe the power of play to be extraordinary and supremely serious.
> Playtime aids growth.
> Play is a voluntary activity.
> Play offers a child freedom of action.
> Play provides an imaginary world a child can master.
> Play has elements of adventure in it.
> Play provides a base for language building.
> Play has unique power for building interpersonal relationshps.
> Play offers opportunities for mastery of the physical self.
> Play furthers interest and concentration.
> Play is the way children investigate the material world.
> Play is a way of learning adult roles.
> Play is always a dynamic way of learning.
> Play refines a child's judgements.
> Academics can be structured into play.
> Play is vitalizing.

The purposes and achievements of play can be more fully summarized as follows (Weininger 1980, pp. 51-54):

(1) Play makes use of growing muscular skills and helps coordinate the developing muscle systems, in terms of both gross-motor movements (e.g., climbing, skating, jumping, running, playing ball) and fine-motor coordination (e.g., Lego, bolt boards, puzzles, breaking eggs).

(2) Play fosters social interaction and social encouragement.

(3) Play enhances sensory development, through the use of kinesthetic and haptic senses in co-ordination.

(4) Play clears up cognitive confusions, such as the variance between school values and home values or the confusion in social roles presented in fact and in concept formation.

(5) Play provides for clarification of roles through role-playing.

(6) Play relieves and releases experiences which are painful to the child and which often have prevented the learning process from continuing; the child can learn through playing both fearful and satisfying experiences.

(7) Play fosters self-understanding, allowing children to

express in their own way and so gain confidence in their ideas and to see that these ideas can work. They explore new situations which they previously would have avoided out of anxiety. With self-understanding, children acquire a sense of independence by playing and exploring the idea of being themselves or someone else.

(8) Play aids in the development of concepts, such as mathematics, social judgement, reasoning, remembering, abstraction, direction, deductive and inductive reasoning, drawing, and writing.

(9) Play provides opportunities for exploration.

(10) Play increases sensory input and increases cognitive awareness of the environment.

(11) Play provides opportunity for achievement through the repetition of the pattern of attempt, practice, and master.

(12) Play reduces uncertainty, through the gaining of confidence to begin to investigate novel or complex stimulation.

(13) Play enhances creativity and the capacity to perform tasks which require ingenuity in formulating an answer not readily suggested by the materials themselves or by another person.

The major purpose of play, therefore, is the fostering of the creative potential of children. Research has shown that creativity is related to several factors other than intellect (e.g., mentally-retarded individuals are often very creative (Ford and Renzulli 1976)) and creativity and learning cannot be increased by reward (Ward and Kogan 1970). Rather, creativity is derived from internal capacity; this capacity is stimulated into action by:

(1) an unstructured environment which has guidelines, because structured play may not be sufficient for learning to proceed; and

(2) an environment which takes into account children's emotional attitudes and self-concepts (Piaget 1962).

The lack of creative opportunities leads to boredom and monotony; the result is that individual children do not reach their full level of physical, social, and cognitive development.

In summary, then,

> Play is a child's world. It is THE medium for learning about life, about other people, and about oneself. It is the hild's way of exploring every minute detail of the enviroment, of testing personal capabilities and limits, and omaking new friends. (Hutchison 1978, p. 4)

TYPES OF PLAY

Jeanrenaud and Bishop (1980) have examined the roadblocks to creativity through play. They argue that attention is gained by novelty (the extent to which an object differs relatively or absolutely from that which occurred before), intensity (the extent to which an object stands out from the rest of the environment), and complexity (the extent to which an object has many different parts and/or unusual arrangements or combinations of parts). Both novelty and intensity must be sufficient to attract the child's attention, but cannot be too high or the child will avoid the object. The process of exploration -- which is not necessarily conscious or deliberate -- by which an individual acquires a wide range of information adds to a person's repertoire of possible ideas and responses. The availability of this repertoire at a later time makes it possible for the person to produce many ideas or actions in a given situation. This potential is a necessary, though not sufficient, condition for creativity to occur.

Creativity, then, is the production of novel responses that have an appropriate impact in a given context. Jeanrenaud and Bishop (1980, pp. 78-79) state that there are two conditions for creativity. First, the ability to make novel responses comes primarily from exploratory-play experiences in which children learn the many different things that they can do to an object, thereby accumulating a repertoire of potential responses which gives a higher probability of creativity in the future. Exploratory play increases the motivation to make novel responses or at least reduces the fear of making them. Second, the ability to make appropriate or useful responses comes primarily from assimilation-play in which children develop specific, known skills, thereby perfecting -- within the limits of their existing abilities -- their understanding of a skill at some particular situation or task. The process results in thorough and permanent skills.

Jeanrenaud and Bishop (1980), as noted above, divide play into two categories in terms of creativity: exploratory and assimilation. Other writers, however, have found it useful to use other categories to describe the role of play, particularly social play and cognitive play (Henniger 1980).

Parten (1932) developed a scale of social play categories to describe the extent to which children participate in social interactions:

(1) unoccupied behaviour: the child is not playing, but rather occupied with watching anything of interest;
(2) on-looker: the child does not overtly enter into the play, but is observing particular groups of children;
(3) solitary independent play: the child plays alone and independently; there is no effort to get close to other children;
(4) parallel activity: the child plays independently, but the activity chosen naturally brings him/her among other children; the child does not try to influence the play of others, but rather plays beside and not with them;
(5) associative play: the child plays with other children, including conversing, borrowing, following, etc.; while each child acts as he/she wishes, the interest is primarily in associations and not activity;
(6) co-operative or organized supplementary play: this is group play, with a sense of belonging, some degree of contol over the group, and a degree of organization;
Shure (1963) adds the category of "solitary-same" play, fitting between solitary independent play and parallel activity play, in which the child plays alone and independently with toys that are the same as those used by the surrounding children.

Based on the work of Piaget (1962), Smilansky (1968, pp. 5-7) describes a series of four cognitive play categories that children pass through as they develop:

> FUNCTIONAL PLAY. At first the play of a child consists of simple muscular activities based on his need to activate his physical organism. He/she repeats actions and manipulations, imitates them, tries new actions, imitates them, repeats them, and so on.
> CONSTRUCTIVE PLAY. This form of play introduces the child to creative activity and thereby to the personal joy of creation. He/she moves from functional activity to activity that results in a "creation." From the sporadic handling of sand or bricks the child moves to building something from those materials that will remain after he/she has finished playing.
> DRAMATIC PLAY. The child takes on a role: he/she pretends to be somebody else. While doing this, he/she draws from first or secondhand experience with the other person in different situations. He/she imitates the person, in action and speech, with the aid of real or imagined objects.
> GAMES WITH RULES. Here the child has to accept prearranged rules and adjust to them. More important he/she learns to control his/her behaviour, actions, and reactions within given limits.

Various studies have used these and similar categories of play to describe and analyze the play behaviour of children. The purpose of presenting them here is to suggest the complexity of the play experience and the simultaneous and interacting roles of play in a child's development.

THE DISABLED CHILD

Various studies have indicated that approximately 10% of the population is disabled in some way (Bushell and Kelley 1974), yet the common trend in the recreation field is to adopt a form of "tunnel vision" characterized by a restricted outlook based upon the limits or handicaps of individuals rather than their abilities. The result is either (1) the provision of no service for the disabled or (2) the provision of service that results in dependency (Avedon 1965). Either of these situations can lead to a compounding of the initial disability -- whether it be physical, cognitive, or social -- into a form of social handicap characterized by isolation, boredom, and retarded development (Austin and Hayes 1974).

It appears that the play of disabled children follows the same patterns as that of normal children (Dartner 1969). It could be argued, however, that play is even more important for the disabled child than for the non-disabled child:

> For the child with a disability, play experiences are especially important in order to maximize the rate of physical, cognitive, and social development. A child who is blind learns to manipulate objects, explore the environment, and move in a coordinated fashion. A child who is mentally retarded demonstrates confidence in playing and interacting with peers, due to early stimulation and play experiences with family and neighbourhood children.
>
> Unfortunately, many children with a developmental disability have few opportunities to play and interact with non-disabled children....
>
> The tragedy of these circumstances is that the potential of play to provide a non-stigmatizing context is often over-looked. At play, differences, novelty, and change are valued. This is in contrast to other more structured environments where predetermined standards and outcomes limit the range of possibilities. (Hutchison and Lord 1979, p. 6)

The potential for a playground to provide such a

non-stigmatizing, less-structured context is obvious.

While numerous authors have argued that play contributes to the total development of the person (e.g., Benoit 1955; Pepler 1975), Hutchison (1978, pp. 4-6) demonstrates how important play is to the disabled child:

> 1. During play, infants and children explore themselves and the environment through a number of senses -- visual, auditory, tactile, taste, and smell. Play is therefore the prime medium for PERCEPTUAL development (Frank, 1968). For a person who may be unable to use one or more of these senses effectively, there is often a shift to utilizing the remaining senses to a much greater extent. For example, a child who is blind or partially sighted will depend heavily on touching and hearing during play. Initially, this child may need encouragement and stimulation in order to fully utilize these senses.
>
> 2. During play, a child is very active. The development of many PERCEPTUAL-MOTOR attributes is enhanced through play. As the child develops, sensory information becomes integrated and movements become more purposeful, precise, and refined. If a person lacks spontaneity or initiative because of a mental disability (Wehman, 1977), or has decreased mobility due to a physical handicap (Morris, 1974), developing perceptual-motor skills through play is more difficult. Encouragement to become more active during play can be given by utilizing more stimulating and appropriate equipment (Cleland et al., 1971; Hayes, 1975; Wehman, 1977), enthusiastic and supportive peers, and developmental experiences which build confidence.
>
> 3. Learning experiences in play are important for COGNITIVE development. During play, the child explores, manipulates, creates, and experiments. The child learns to understand the self and how one's actions can affect the environment and visa versa. Through play, children learn to express themselves, and to develop symbols and language, judgement, and problem-solving skills (Hartley, 1971). Play with non-disabled peers and siblings is essential for disabled chidren. It provides the chance to practice language, to imitate, and to gain confidence in newly learned skills.
>
> 4. Finally, play is a valuable medium for PSYCHO-SOCIAL devlopment. During play, opportunities for social interaction enable people to acquire co-operative skills and to form close, meaningful

> relationships with peers. Play is relatively free of external rules and constraints, allowing the person to grapple with independence and to develop self-esteem and confidence. Because there has been a tendency to overprotect disabled persons, many individuals have had difficulty developing emotional and social competencies. During play, opportunities must be available to risk, to discover oneself, and to establish peer relationships.

Particular importance should be placed on the social interaction aspects of play for the disabled child. Various studies indicate that preschool children create their own social environment; therefore, positive social imitations by normal or less-disabled children could be employed to increase the positive social behaviour of withdrawn, disabled children. This peer interaction can also faciltitate linguistic, cognitive, and social skills; also, peer-mediated strategies produce more rapid and durable behaviour change than adult-mediated tactics. If children have limited peer interaction, they are "at risk" for developmental delay and later-appearing adjustment problems (Hitzhusen 1975; Strain 1977; Strain and Hill 1979, pp. 66-75; Strain et al. 1977).

The lack of social interaction is underscored by the fact that as many as 80% of disabled adolescents and adults never leave their immediate neighbourhood to travel or participate in community functions (Gozali and Charney 1972; Stanfield 1973), a figure which is the same for interaction with either disabled or non-disabled peers (Katz and Yekutiel 1974). Data are not available on the proportion of disabled children interacting with disabled or non-disabled peers outside of their neighbourhood, but it is probably comparable.

THE "PLAY VERSUS THERAPY" DILEMMA

Traditionally, attitudes of the general public have tended to focus on negative role perceptions of disabled people (Wolfensberger 1972). For example, there is still a generally common view of the retarded as "sick" persons (Wolfensberger 1969). The result is a sense of pity and, in many cases, of fear -- fear of the unknown, fear of differentness. Shivers and Fait (1975, p. 53) note that

> The general public has traditionally been unable to accept the handicapped. For most people the simple course of shutting the ill and handicapped away was not only acceptable but desirable. Ignorance of facts

> has been a prime determiner of how the public treats its afflicted minority....(A)n attitude of "out-of-sight, out-of-mind" prevailed.

This low tolerance for individual differences has resulted in labelling, segregation, accentuation of differences, and rejection. In this way, the "disability" is turned into a "handicap" (Hutchison and Lord 1979, p. 17) and, in many ways, a process of "dehumanization" occurs, which results in a less-than-human status for the handicapped (Vail 1967). That such views are still widespread contradicts Kraus' (1966, p. 303) optimism of over fifteen years ago:

> ...public attitudes have not yet become fully mature with respect to the handicapped. Many people still have feelings that range from excessive and therefore undesirable pity (which overprotects the handicapped person and makes him less likely to help himself), to dislike, outright rejection, or even fear. However, by and large, the view is being accepted that the handicapped are much like everybody else, with important physical, social, and emotional needs that must be met, if they are to reach their fullest potential as human beings.

The attitude of the disabled being sick or of little value results in what Hutchison (1978, pp. 5-7) terms the first option in the nature of the play opportunities made available: few or no opportunities may be available, as for example in many institutions, hospitals, and paediatric wards which provide little or nothing in the way of play and leisure for clients. (See Figure 8.)

This failure to view the disabled as developing human beings with abilities (Wolfensberger 1972) has frequently resulted in the adoption of a therapeutic view of recreation services for the disabled, with a focus on the curative functions of therapy, that is, the "correction" or "cure" of some dysfunction in the traditional sense of rehabilitation being solely medical in nature and being designed to hasten recovery (Shivers and Fait 1975, pp. 55 & 196). With the focus on disability rather the person's abilities, there is a tendency to fragment the person's developmental needs (physical and perceptual-motor, psycho-social, cognitive) into what Hutchison (1978) terms the second option concerning the nature of the play opportunities made available: with play being replaced by therapy or training, the focus is on one domain, often to the exclusion of others. For example, there might be a focus on training activities emphasizing physical development for the physically-disabled; on intellectual

Figure 8: HUTCHISON'S FOUR PLAY OPTIONS

(1) Few or no opportunities available (e.g., many institutions, hospitals, and paediatric wards).

(2) Play being replaced by therapy or training.

(3) Play as a viable vehicle for development.

(4) The "play/training model."

Source: Hutchison (1978, pp. 5-7)

development for the mentally-retarded; or on techniques for modifying behaviour for the emotionally-disturbed. Such approaches "turn play into work" (Greene and Lepper 1974).

A much broader view of therapy can be adopted, however, if a wider definition of rehabilitation is adopted, which involves both the medical aspect and retraining -- or training in the case of children -- to live and work with what is left:

> ...first...to eliminate the physical disability if that is possible...second...to reduce or alleviate the disability to the greatest extent possible; and...third, to retrain the person with a residual physical disability to live and work within the limits of the ability, but to the hilt of his capabilities. (Rusk 1958, p. 7)

The goals of rehabilitation, therefore, should be:
(1) stabilization or arrest to deterioration of existing abilities;
(2) development and strengthening of skills that are imperfectly developed or that have suffered some deterioration or atrophy; and
(3) provision of alternative compensatory skills to replace those that are lacking or irreplacably damaged (Austin and Hayes 1974; Dattner 1969).

Shivers and Fait (1975, p. 243) provide an even more detailed description of the objectives of rehabilitation:

> (1) improvement or restoration of strength, endurance, flexibility, mobility, coordination, and cardiovascular and pulmonary sufficiency;
> (2) arousal of interest, improvement of concentration, increase in attention span, and assistance in the release or channeling of productive energy, the lessening of destructive tendencies and in causing normal fatigue;
> (3) encouragement of emotional stability, influence on mood, re-establishment of acceptable behavior patterns, inhibition of deterioration or regressive tendencies, assuaging of guilt feelings, control of psychotic inclinations by blocking or blotting out delusions, and enhancement of social capacity through improved interpersonal relations with individuals and groups;
> (4) promotion of normal interests in recreational activities, of acceptance of disability, and of the preparation of the individual for his eventual return to home and community life.

The result is the following definition of therapeutic recreational service:

> ...the provision of activities which are prescribed and adapted to meet an individual's limitations or restrictions imposed by some mental, emotional, social or physical disability or disease....It is therapeutic in the sense that there is directed or purposive intervention in the individual's behavior and this attempts to modify behavior in order to achieve a predetermined objective. Assisting the client in a more rapid rehabilitation or recuperation is the process's single most important goal. There is also the positive objective of providing recreational skills and experiences which permit the individual to have a more satisfying life within the community or treatment center. (Shivers and Fait 1975, p. 1)

Therapeutic recreational service, therefore, is not a scientifically-administered regimen wherein cause and effect relationships are absolutely defined because there are too many variables involved. Therapeutic recreational service is an art not a science because it deals with the vagaries of human nature and personality.

Shivers and Fait (1975, pp. 55-56) develop this notion into the concept of adapted recreational service, a process which has two facets:

(1) the adaptation of recreational experiences permitting the exercise of such pursuits transforms diversion into a restorative or preventative function; the act of modifying recreational activities decreases the limitations placed on individuals by disabling circumstances, thereby enabling them to compensate for the disability while stimulating whatever abilities they have; and

(2) adaptation supports individuals psychologically and encourages pursuits that build confidence in their ability to perform what was previously thought to be impossible, thus improving morale and sustaining personal self-confidence.

This concept sees all of the developmental aspects of humans as being inter-related and may result in what Hutchison (1978, p. 6) terms the third option of the nature of play opportunities being made available:

> Play is seen more and more as a viable vehicle for development; play allows the "developing human being" to emerge because it permits: freedom and the chance to try new things; a focus on intrinsic motivation; choice, risk, and variability; and the opportunity for

> people to participate at their own levels of development.

Hutchison (1978, p. 5) argues, however, that a fourth option must also be considered with people who are more severely disabled or who have low skill levels. Lord (1975) calls this option the "play/training model." It combines Hutchison's second and third options and is based on the assumptions that some people may require specific training in order to acquire certain skills and that bringing together play with training may be a particularly meaningful way to accomplish this goal. Hutchison (1978, P. 5) gives the example of a pre-school experience which serves as both a play group and an infant stimulation programme:

> In such a play/training approach, there needs to be a delicate balance between the components of play (i.e., freedom, independence, few adult constraints, risk, and intrinsic motivation) and training (e.g., support, structure, feedback, and developmental sequences). Successful integration of play and training will enable the child to reap the benefits of play, and at the same time, acquire a variety of necessary skills. There is little reason why most of the upgrading and training experiences currently available for persons who have disabilities cannot be reformed and accomplish their objectives within a play oriented setting.

Skills which may need to be upgraded include not only physical skills (e.g., running, swimming, personal care), but also social skills and competencies (e.g., self-confidence, self-esteem, interpersonal skills) (Corcoran and Goldstein 1977; Luckey and Shapiro 1974; Pomeroy 1974).

Such "upgrading" experiences may occur in either segregated or integrated settings, depending on the level of development of the particular person. It is important to emphasize that segregated settings can serve constructive purposes. For example, the Handicapped Adventure Playground Association in Great Britain -- founded by Lady Marjory Allen of Hurtwood -- provides adventure playgrounds for disabled children:

> ...segregation is undesirable...(but)...The opportunity to go to specially designed, equipped and staffed playgrounds allows them to attempt and achieve all kinds of physical and mental activities, at their own speed, and without the competition of more able children. If their disabilities are so severe that

> they can never hope to manage with non-handicapped children, than at least they have the compensation of their own play ground -- building tree-houses, rolling down grassy slopes, splashing in water, making their own waggons, lighting bonfires and cooking sausages. (Allen 1975, p. 3)

Whether a programme is integrated or segregated, the major point is that the activities should be determined by the needs and desires of the individuals involved; each individual should receive and participate in a program tailored to his/her own needs (Carlson and Ginglend 1968; Council for Exceptional Children 1966; Pomeroy 1974).

CHAPTER 4: TYPES OF DISABILITIES AND THEIR IMPLICATIONS FOR PLAY

COMMON CHARACTERISTICS OF DISABLED CHILDREN

In addition to problems which are directly attributable to the nature of their particular disability, many preschool disabled children have in common certain characteristics (Wehman 1979, p. 2):

(1) slower rate of motor development;
(2) impaired language abilities;
(3) deficient self-care skills;
(4) little affection or positive emotion displayed;
(5) infrequent spontaneous exploration of environment;
(6) limited amount of social interaction;
(7) poorly-developed attending skills, with only loud sounds or gross changes in visual stimuli resulting in orienting responses;
(8) greater amounts of and more frequent reinforcement required, with reinforcement contingencies that are clearly labelled.

These difficulties are, in part, related to the particular disability. In many ways, however, they are more a function of the children's up-bringing and way of life and of the social, physical, and emotional barriers which are placed in their path toward normal development.

This situation is reinforced in the context of play by the lack of experiences many of these children have had with "normal" play opportunities. Frequently, their only experiences with play have revolved around therapy in the traditional sense. In Ellis' (1973) terms, they have not learned that play should be pursued for the joy of engagement in an activity, without external consequence, and that play behaviour ought to occur as a result of the intrinsic reinforcement derived from the play activity itself. Without external reinforcement presented contingent on play activity or exploratory behaviour, severely-disabled children may display little sustained activity -- they have never "learned how to play."

By the time disabled children are of school-age, they need more complex and sustained toy-play and a greater frequency of social interaction (Wehman 1979, p. 3). Without appropriate past experiences, however, they are usually deficient in behaviours that are critical to the acquisition of these skills. Serious problems in the development of play skills are created by: deficits in visual tracking and

searching skills; and general failure to learn in other than intentional learning situations (e.g., incidental learning) (Hardin and Drew 1975). As a result, these children exhibit certain common patterns in their play behaviour:

(1) inappropriate play behaviour occurs because the child has not been taught appropriate behavioural alternatives for using play materials and has not learned the reinforcing value of certain toys;

(2) there is limited cooperative play and a lack of social interaction between peers;

(3) independent or isolated play is common (Paloritzian et al. 1971);

(4) there is little peer interaction because of a failure to develop higher level social behaviours (e.g., co-operation and competitive play), resulting in little affective interaction;

(5) if social interaction is not encouraged at a young age, the long-range outlook for competent social behaviour is not bright.

Wehman argues that it is necessary to analyze the behavioural strengths and weaknesses of each individual child, in terms of such characteristics as attending skills, incidental learning abilities, language behaviour, gross and fine motor skills, social responsiveness, and reinforcement preferences.

The developmental skills of a child must obviously be individually assessed. It is possible, however, to describe in general the basic types of disabilities and the implications for play. It must be remembered, however, that no child is "totally disabled" or "totally handicapped," as is implied by the use of such terms as "the disabled" and "the handicapped" (Wright 1960, pp. 7-8). Each child has his/her own abilities and developmental potential. It is the purpose of play to maximise the abilities and the potential.

PHYSICAL DISABILITIES

(A) SENSORY DISABILITIES

Sensory stimulation is a significant aspect of environmental awareness and can be cultivated through exploratory play (Granger and Wehman 1979, p. 127). Sensory interaction is the ability to take in, sort out, and connect information with the surrounding world. In normal development, the sensory synthesizing of information takes place automatically; its function is to provide an individual with differing systems for protection and survival, as well as

allowing an individual to interact and learn from the environment. Since severely disabled individuals frequently demonstrate deficits in motor performance, it is logical to suspect deficits in sensory processing which relate to delayed cognitive development and exploratory play. Sensory stimulation seems to be a potent means of improving sensorimotor awareness in the severely disabled; in turn, sensorimotor awareness enables an individual to interact more effectively with his/her environment (Newman et al. 1975; Safford et al. 1976).

As Piaget (1962) notes, the human infant's perceptual and manipulative explorations of objects constitute the most important learning experience. While the child also explores the world through the tactile (touch), gustatory (taste), and olfactory (smell) senses, the primary types of sensory stimulation that are of concern from a disability point of view are visual (sight) and auditory (sound). The benefits to be derived from play and recreation for the child with a visual or auditory disability are:

(1) development of physical education and motor skills;
(2) development of body-awareness and self-concept;
(3) development of kinesthetic awareness and object concept;
(4) social interaction and integration;
(5) stimulation of remaining senses; and
(6) creation of feelings of success and an increased sense of independence (Nesbitt and Howard 1975).

(i) Visual Disablities

In describing the various types of disabled children using London's Chelsea Adventure Playground, Whitaker (1973, p. 2) notes that blind children were "undoubtedly the most perceptive, adventuresome and constructive of all the different groups....(T)hese children explored the Playground and its facilties to the full." Such an observation is contrary to many false beliefs that are common concerning visually-impaired children, such as: they have more accidents and injuries than normal children; they are unable to participate effectively in the activities of regular or adapted programmes; and they require more supervision than normal children (Buell 1969, p. 7).

It is important to recognize that there is a wide range of visual impairments:

> The "blind" person has a vision acuity of 20/200

> or less. Such an individual may be totally blind in both eyes or in one or barely able to distinguish motion or light....
>
> The "partially sighted" person has visual acuity ranging from 20/70 and can see some light, forms, a few bright colors as well as black and white, and can detect some movements.... (Vannier 1977, p. 53)

Blindness and partial sight can result from a number of causes:

(1) heredity;

(2) diseases, such as trachoma, opthalmia, gonorrhea (which leads to prenatal blindness), scarlet fever, smallpox, and measles; and

(3) accidents (the chief cause for young children).

There are a number of characteristics that are common with children having visual disabilities:

(1) tendency to obesity due to lack of large-muscle activities (e.g., running, jumping, skipping);

(2) poor posture and coordination;

(3) peculiar mannerisms known as "blindisms" (e.g., rocking back and forth, frequent eye-rubbing with fists, turning around-and-around like a spinning top, hand-waving in front of the face, and head-nodding) which are attempts at personal sensory stimulation;

(4) educationally-retarded;

(5) awkward movements;

(6) poor small-motor coordination;

(7) lower than average intelligence;

(8) more likely to have emotional and personality problems;

(9) fear of novelty (Wills 1968);

(10) tendency to be sedentary and solitary;

(11) frequently engaged in fantasies and daydreams;

(12) often depressed and feel rejected by parents, family, and normal peers;

(13) keener of hearing, feeling, tasting, and smelling than the normal;

(14) a more marked kinesthetic sense -- termed "obstacle perception" -- so that they avoid running into walls or stumbling over curbs;

(15) reluctance to take part in activities that require speed, strength, skill, and physical endurance;

(16) fearful of the future; and

(17) over-protected by parents (Ibid., p. 52).

There appear to be few activities that the visually-disabled cannot participate in (unless the danger of a detached retina is diagnosed) (Howard 1979, p. 234). There

are, however, five major areas of behaviour that have to be considered (Ball 1974):

(1) personality adjustment characterized by feelings of hopelessness resulting in over-compensation and social withdrawal with excessive fantasy manifestations;

(2) mobility restrictions in relation to the special environment resulting in physical fear of pain in an unknown area;

(3) space perception in relation to general and specific orientation;

(4) communication, both verbal and non-verbal; and

(5) creativity.

These, in turn, have serious implications for the nature of a play environment:

(1) physical fitness opportunities are particularly important (Buell 1966);

(2) social interaction should be fostered (Howard 1977, p. 236);

(3) verbal communication should be fostered (Willard 1978, p. 9);

(4) hidden dangers (e.g., unexpected security aids or heights) must be avoided (Whitaker 1973, p. 2);

(5) a complete orientation to the site and clear instructions and signals (e.g., using a whistle) should be given to the children by leaders (Vannier 1977, p. 55); and

(6) sites should be well-lighted for the partially-sighted (Shivers and Fait 1975, p. 233).

(ii) Auditory Disabilities

As with visual disabilities, there is a wide range of auditory impairment (Wisher 1969, p. 11), ranging from partial to complete. Many children are mistakenly labelled as being retarded or slow learning when their learning problem is actually caused by deafness (Vannier 1977, p. 59). Auditory disabilities may be defined as "...that point where normal auditory communication is nearly or totally impossible" (Davis 1960, p. 81).

> The "hard of hearing" can hear enough to learn how to speak and may or may not have a hearing aid. Those classified as "deaf" (from birth) cannot hear nor speak unless taught to do so by a speech therapist. (Vannier 1977, p. 61)

A hearing aid may take a person from a "deaf" classification to "hard of hearing." The factors in sound reception and its use in communication are: pitch and loudness of sound; age of

onset of disability; and ability to hear some or no sounds (Howard 1977, p. 245).

Deafness and hearing loss can be congenital or acquired after birth by disease, infection or accident. Hearing loss can be classified as:

(1) psychogenic: associated with psychological or emotional problems, but with no physiological cause;

(2) central: caused by diseases of the central nervous system (e.g., tumour, arteriosclerosis, cerebral hemorrhage, or multiple sclerosis);

(3) conductive: caused by damage in the outer or middle ear or Eustachian tubes;

(4) sensorineural: damage in the inner ear or auditory nerve due to prenatal factors (e.g., the Rh factor or infections such as measles and influenza in the first three months of pregnancy); also termed "perceptive" or "nerve" deafness;

(5) congenital: caused by nerve injury during birth or an inherited defect; and

(6) mixed: two or more types in the same ear (Vannier 1977, pp. 60-61; Willard 1978, p. 19).

Many of the problems associated with the deaf can be traced to communication difficulties (Wisher 1969, p. 11). The following may be characteristic of persons with an auditory disability:

(1) limited vocabulary;

(2) faulty speech patterns and faulty pitch, tone or volume;

(3) limited verbal communication, with a reliance on non-verbal communication (e.g., facial expressions, gestures or actions);

(4) limited social experience, resulting in a lack of ability to handle defeat, errors, etc.;

(5) inattentiveness and excessive daydreaming;

(6) inability to follow directions;

(7) emotional instability and hostility or extreme withdrawal;

(8) failure in school, due not to lack of intelligence but to communication problems;

(9) difficulty in maintaining balance; and

(10) inability to join in group discussions and games, resulting in social isolation (Shivers and Fait 1975, p. 233; Vannier 1977, p. 60; Willard 1978, p. 19).

In summary, persons with auditory disabilities tend to be behind their normal peers educationally, physically, and socially, but those with partial hearing tend to be more stable, more outgoing, and more socially sure than the totally deaf (Vannier 1977, p. 60).

Despite these difficulties, deafness need not be a barrier to recreation behaviour in terms of activity, but only in terms of communications and social interaction. For example, warning sounds are important in certain activities; aesthetic sounds affect the nature of many experiences; and other sounds affect conceptual understanding, particularly abstract words. There is no particular activity or experience that is especially recommended for the deaf child; all high-quality play experiences should prove valuable, particularly if there are opportunities to reduce social isolation. Because the deaf need to become more self-directed and to increase creativity and mastery over the environment, rich play environments can help deaf children to become more aware of theirr world and their relationship to it (Howard 1977, pp. 248-257). Research has also shown that free play settings -- as would occur on an adventure playground, for example -- encourage more verbal interaction with normal peers than do structured classroom settings (Brackett and Henniges 1976).

(iii) Visual-Auditory Multi-disability

The deaf-blind child possesses perhaps one of the most difficult types of disability: "To this child the reality of the world is within himself....His world is a dark soundless space" (Howard 1977, p. 258). The combination of difficulties presents enormous barriers for the use of play environments; however, a great deal of developmental benefit can be achieved by sensitive, professional play leaders working within rich play environments.

(B) ORTHOPEDIC DISABILITIES

It is important to realize that there are many kinds of orthopedic disabilities,

> ...some easily detectable, others not quickly recognized. Some persons are born minus a hand or fingers; some have deformities of the head or trunk; some walk with the aid of crutches; others are pushed or propel themselves in wheelchairs....Orthopedic disabilities involve varying degrees of seriousness, and the causes are varied. Some are relatively simple to treat, such as round shoulders; some are chronic and debilitating, such as certain types of arthritis;

> still others are permanent and incurable....(W)e include...any defects that involve bones, joints, and muscles. It is important to recognize that all such ailments can be treated, if not cured, by specific physical exercises; and a physical education and recreation program should be an important part of the lives of those who are so handicapped. (Vannier 1977, p. 64)

Such disabilities, therefore, inhibit the performance of normal movements. More specifically, motor performance can be slower, less free, and less co-ordinated; balance can be poorer; and the functioning strength of other limbs may be decreased (Hunt 1955, p. 106).

Orthopedic disabilities can be classified as being either (1) congenital or (2) adventitious (Hunt 1955, p. 104; Kraus 1973, p. 117; T. A. Stein 1977, p. 200).

(1) Congenital disabilities consist of prenatal malformations, defects or injuries existing at or before birth (e.g., congenital hip dislocation, spina bifida, talipes (clubfoot), scoliosis (a lateral curvature of the spine), and congenital malformations caused by rubella (German measles) or medication (e.g., thalidomide)).

(2) Adventitious disabilities can be divided into two basic types: (a) traumatic and (b) chronic.

(a) Traumatic disabilities are caused by fast-moving or critical incidents, such as accident, assault, and war; the results include amputations and paralysis.

(b) Chronic disabilities are caused by diseases or conditions that may be slow-moving and progressive or in an arrested state; examples of such diseases include osteomyelitis, poliomyelitis, and tuberculosis of the bone and examples of such conditions include osteochondritic (e.g., Pettheses disease) and nutritional (e.g., rickets) difficulties.

Perhaps more so than with other forms of disability, it is true that with orthopedic disabilities the extent of the disability does not always determine the extent of the handicap. The failure to function in a given task may be more the result of other-imposed or self-imposed barriers (Hunt 1955, pp. 44-48). Such barriers may be either architectural (e.g., curbs, steps, revolving doors, escalators, restrooms, public telephones, water fountains, light switches, public transit) or attitudinal (myths, misconceptions, misinformation, lack of information) (Bushell and Kelley 1974, pp. 6 & 8). It is, therefore, apparent that the orthopedically-disabled person "is less affectd by his physical incapacities than by how he adjusts to the reactions

of others towards him" (Hunt 1955, p. 104) and by the physical barriers which hamper movement and other functions. The emotional problems of such persons must be considered and treated seriously. The age of the person and the suddenness with which any incapacitating disability strikes have a great effect on how the person reacts to the difficulty and on the length of time and the type of therapy required. For example, those in their teenage years or older who lose an arm or leg by amputation usually have a more serious adjustment problem than children born with similar disabilities (Vannier 1977, p. 65).

The effects of some of the major orthopedic disabilities will now be discussed briefly.

(i) Amputations

Amputations are classified as:
(1) congenital: due to improper development;
(2) traumatic: due to accidents; and
(3) elective: in which the upper or lower extremities are removed by surgery because of a congenital or traumatic condition (Vannier 1977, p. 73).
An articifical limb -- or "prothesis" -- is frequently worn as a replacement for a limb. Protheses can by simple, mechanically-operated devices, or sophisticated, electronically-controlled ones. As children grow, the prothesis must be changed to meet their needs and physical size.

Many amputees require counselling to overcome both physiological and psychological difficulties, such as problems with balance, symmetry, and "different" appearance. Of particular importance is the need to maintain physical fitness.

(ii) Arthritis

Arthritis means inflammation of the joints. There are four main types:
(1) fibrositis: pain in muscle tendon and tissue arround the joint; it does not involve real joint damage;
(2) gout: swelling around a joint, making movement painful and possibly crippling;
(3) osteo-arthritis: gradual wearing-away of areas separating bone connection and even of the bones themselves;

it is not as serious as other types, nor is it rapidly-crippling; and

(4) rheumatoid: extremely crippling (Ibid., p. 75).

Along with medical treatment and diet control programmes, exercise can aid a great deal in development and rehabilitation.

(iii) Muscular Dystrophy

Muscular dystrophy, a chronic and progressive degeneration of the muscular system, frequently results in death before adulthood. There are various types of the disease, but the most common is Duchenne or pseudohypertrophic dystrophy which affects males three times more frequently than females and occurs between the ages of 3 to 10 years. Early symptoms include an awkward waddling walk, frequent falls, and difficulty in running, climbing stairs, and getting up from a sitting position. Gradually, the child becomes unable to walk and is confined to a wheelchair. Eventually, muscle deterioration leads to the child becoming bed-ridden (Ibid., p. 76; Willard 1978, p. 41). The disease does not, however, affect intelligence.

Increasing muscular deterioration leads to greater reliance on others for assistance. This gradual loss of independence is frequently difficult for a child to accept and is reinforced by excessive sheltering by parents. A play programme, therefore, must not only deal with the difficulties created by muscular deterioration and the necessity for physical activity, but also with the importance of the development of self-concept and of opportunities for peer interaction.

(iv) Musculoskeletal Disabilities

While many persons suffer from musculoskeletal problems of a temporary nature (e.g., sprains, strains), others suffer from more debilitating, long-term problems as a result of congenital birth defects or other temporary or chronic conditions. These include:

(1) kyphosis: round shoulder;

(2) lordosis: hollow back with a protruding rear;

(3) scoliosis: crooked back or S-curve of the vertabral column;

(4) forward head tilt;

(5) protruding shoulder blades;

(6) faulty foot mechanics; and
(7) flat feet (Vannier 1977, pp. 77-78).
These difficulties can be classified as "structural" (permanent) or "functional" (correctable) disorders; while many of the structural problems can be alleviated through therapy and exercise, many of the functional problems can be totally corrected. Persons with such problems, however, may feel inferior and self-conscious; counselling may be required for emotional problems. While many suffer from co-ordination problems, play and recreation can be used successfully to overcome many of the difficulties.

(v) Spina Bifida

Spina bifida -- literally "split spine" -- is a congenital defect in which the spinal column is not enclosed in the lower body, owing to a posterior fusion defect of the vertebral arches, which results in a malformation of the spinal column. The cause is unknown and its effects may include: complete or partial paralysis; loss of sensation in the legs due to nerve damage; and loss of bladder and bowel control. Corrective surgery usually occurs within twenty-four hours of birth, but the child may require a wheelchair or crutches; in addition, bowel and bladder toiletting routines may need to be established. Intelligence is not affected.

The degree to which a child with spina bifida can participate in play and recreation programmes depends upon the individual degree of disability. In general, activities requiring speed, agility, and much movement will present difficulties, but social activities are especially suitable because of the amount of enforced leisure time (Ibid., pp. 74-75; Willard 1978, pp. 45-47).

(vi) Facility and Programme Implications

Physical disabilities present a number of implications for the design of both programmes and faciltiies:
(1) paths for movement from one activity area to another may require more space than allowed normally for the passage of two people;
(2) surface configurations must allow for wheelchairs and crutches;
(3) paths must be curved, rather than at right angles;
(4) pathways must allow for the viewing of different structures or landmarks from several perspectives (e.g., from

crawling or wheelchair heights);

(5) all pathways must be either at one level or connected by graded ramps;

(6) high structures (e.g., mounds, high ramps) should not be ignored, because of the positive aspects of the challenge offered;

(7) durable material (e.g., thick beams, redwood, fibreglass slides) must be used to support the extra weight of wheelchairs and support persons;

(8) there should be a variety of plantings in terms of textures and odours (flowers, vegetables, herbs) in order to broaden the range of participants' experiences, but dangerous plantings must be avoided;

(9) handrails are essential at appropriate heights;

(10) "peep holes" can be provided in wooden structures to allow for continuous monitoring of a child's progress without interfering in the child's behaviour;

(11) outside environments provide an added dimension to the life space of a severely-disabled child, who frequently lacks opportunities for large-motor experiences, encounters with elements and media that are distinctive to the outdoors, or movement in a prescribed space that is less confining that that of an indoor setting; and

(12) the presence of water provides novel experiences with sight, sound, and touch (Gordon 1972, pp. 4-36).

It must also be recalled that many physically disabled children have had little experience with play and recreation experiences and, therefore, require constant reassurance, but not constant sheltering (Whitaker 1973, p. 2).

(C) CEREBRAL PALSY

Cerebral palsy is a neurological impairment resulting from brain damage or faulty development of those parts of the brain which control the body's movement

> ...as a result of disease, anomoly, or accident before, during or after birth. Cerebral palsy results in a motor disability that may affect many parts of the body or only a limited groups of muscles anywhere in the body. It can cause weakness, lack of coordination, involuntary motions, paralysis, drooling, facial grimaces, and excessive rigidity or body stiffness, depending upon the severity and location of the brain damage. (Vannier 1977, p. 44)

In addition to their muscular disabilities, the cerebral palsied usually have multiple disabilities, including mental

retardation, auditory and visual disabilities, and emotional disturbances. The result is that many are social outcasts because of their appearance and behaviour. While it is generally believed that most cerebral palsy victims are lower in intellectual ability than the normal population, many have normal and superior intelligence (Kraus 1973, p. 120).

> It is not surprising that many have an excessive need for affection and independence. Although some victims appear docile and submissive, these feelings often hide underlying hostility and inward rebellion. Many have marked feelings of inferiority and escape reality through excessive daydreaming.
>
> There is no cure for this disease, for once brain cells are damaged they remain permanently so. (Vannier 1977, pp. 44-45)

There are several types of cerebral palsy:

(1) spastic: limbs seem tight and stiff; movement of limbs is limited and requires a great deal of effort; body movements are usually jerky and uncertain;

(2) athetosis: involuntary, uncontrollable movements of the arm, leg, and face muscles; control of hands, speech, and swallowing may be extremely difficult;

(3) ataxia: difficulties in co-ordination and balance resulting in unsteady walking and waving of arms to maintain balance; speech and vision frequently affected; difficulties with two-handed tasks (e.g., catching and throwing a ball);

(4) rigidity: a severe form of spasticity, with normal movements replaced by jerky ones; often accompanied by mental retardation;

(5) tremor: uncontrollable involuntary movements which occur in a regular rhythm or pattern; tremors are often mixed with muscle rigidity; and

(6) mixed: a combination of one or more than one of the types, but with one type usually being predominant (Willard 1978, pp. 10-11).

The following terms are also used for classifying the cerebral palsied:

> Degrees of Severity
> 1. Mild -- ambulatory, understandable speech, use of arms and legs satisfactory
> 2. Moderate -- partially disabled, has difficulty moving, speaking, and performing tasks of daily living
> 3. Severe -- involvement complete, confined to bed or wheelchair

Involvement Degree
1. Monoplegic -- one limb involved
2. Paraplegic -- both legs only
3. Hemiplegic -- one leg and arm involved on same side of the body, with the arm often being more so than the leg
4. Triplegic -- involves both legs and one arm; generally spastic
5. Quadraplegic -- all four extremities involved; in spastics, the legs the most affected; the arms most damaged among the tremor and athetoid groups (Vannier 1977, pp. 46-47)

Because of their physical difficulties, the degree of isolation, and problems in communications, cerebral-palsied children are frequently immature and lack the ability to function in social situations. The degree to which a child can participate in activities will, of course, vary according to the degree of the disability, but a mildly-affected child can participate in most activities with little difficulty (Willard 1978, pp. 12-13). The primary goal of any programme should be to stimulate physical and intellectual growth and to help the child gain needed physical and social skills so that each can, in turn, become more acceptable as a member of a normal groups of peers.

Several considerations should be taken into account when planning facilities or programmes for the cerebral palsied:
(1) physical movement is often difficult;
(2) there is, however, a wide range of motor abilities;
(3) strong stimuli frequently confuse them;
(4) loud noises, extreme temperatures, and strong emotional situations should be avoided; and
(5) highly-competitive activities are generally not suitable (Shivers and Fait 1975, p. 234).

(D) OTHER PHYSICAL DISABILITIES

(i) Allergies

A hypersensitivity or allergy is defined as "a body condition in which there is an exaggerated reaction to certain kinds of foreign substances" (Vannier 1977, p. 127). People can be allergic to foods (e.g., eggs, strawberries), plants (e.g., ragweed), or animals (e.g., cats, dogs). Symptoms may include stomach upsets, rash, hives, sneezing, watery eyes, etc., with treatment including medication and avoidance of the causative agent.

With the exception of children who are allergic to dust and pollens whose outdoor activities may need to be restricted, most children with allergies can take part in normal playground activities.

(ii) Asthma

Asthma may be defined as

> ...a respiratory disorder which is characterized by shortness of breath, coughing, wheezing, and a choking feeling caused by blockage of the small air passages. Attacks are sudden, and may last a few minutes, hours, and infrequently days. Between the attacks, the child is free of symptoms. (Willard 1978, p. 5)

The causes of asthmatic attacks include respiratory infections, contact with allergens (e.g., pollen, dust, animal hair), fatigue, and emotions (e.g., anger, frustration, worry, embarrassment). Treatment involves eliminating or avoiding as many of the offending substances as possible; treatment includes medication, drainage techniques, and breathing exercises. Because the attacks are often unexpected and can be frightening, the child may feel "different" and may withdraw from activities.

In play situations, leaders should be aware of the child's problem and be prepared to deal with attacks. Most asthmatic children can participate in all activities if their asthma is under satisfactory control, with limits being necessary only when the child's condition makes it so. Because endurance and competitive activities can cause over-exertion, fatigue, and emotional stress, activities which involve short bursts of physical activity and/or creative, social systems may be most appropriate; therefore, playground activities appear to have a great deal of potential.

(iii) Cardiovascular Disabilities

Cardiovascular disorders include rheumatic fever, congenital heart defects, hypertensive heart disease, coronary heart disease, and cerebrovascular disease. It is imperative that play leaders know which children have heart trouble and the seriousness of each condition. Often, children with such problems may be socially immature because they have been excessively restricted from social activities and involvement

with peers (Willard 1978, p. 15) and may be extremely anxious and shun physical exercise (Vannier 1977, p. 125).

The types of activities in which individual children can partake will be a function of their own medical condition, but many such children require little restriction of activity, with the exception of highly-competitive or emotionally-stressful activities.

(iv) Cystic Fibrosis

Cystic fibrosis is a debilitating disease with an unknown cause and no known cure in which

> ...the mucus glands in the lungs and/or digestive system produce abnormal, thick, gluey mucus....The hacking persistent cough prevalent in Cystic Fibrosis starts when the abnormal mucus begins to block the air passages in the lungs. Children with this disease have little resistance to respiratory infections such as pneumonia and bronchitis. When the pancreatic ducts become blocked by mucus, its (sic) enzymes cannot reach the small intestines to help with digestion. Food passes through the small intestines only partially digested. Thus, the body does not get the normal nourishment from the food, and severe malnutrition may occur. Sometimes, the functioning of the liver may also be affected by the accumulation of mucus. Cystic Fibrosis also causes the sweat glands to produce abnormal salty perspiration. Thus, the child may become dehydrated in hot weather. (Willard 1978, p. 17)

Treatment for lung involvement involves inhalation therapy, postural drainage, and antibiotics; for digestive system involvement, treatment consists of enzyme medication and diet control. There is no intellectual impairment.

Children should participate in activities to the extent of their individual abilities. Physical activity is important for fitness, but strenuous activities may present difficulties.

(v) Convalesence

Play and recreation can be important elements in the

recovery of children following illness or surgery. There is a wide range of situations:

(1) at home and fully ready to participate again in normal activities;
(2) at home, but not fully ready to participate;
(3) in hospital and soon able to go home;
(4) ambulatory cases;
(5) no longer confined to bed, but able to have restricted amounts of physical activity;
(6) confined to bed, but able to take part in some light physical exercises and activity; and
(7) too ill to take part in physical or recreational activities (Vannier 1977, p. 123).

Most large hospitals have a department of physical medicine, physical and/or occupational therapists, and recreational specialists, but families and schools are frequently unprepared to deal with the play and recreation needs of children once they have left hospital.

Such children are frequently weak and have a low level of strength and endurance, but a gradual programme of development -- based on individual medical advice -- can be provided in the form of adaptive recreational and playground programmes.

(vi) Diabetes

Incurable but controllable, diabetes is a disease which most frequently affects adults; only about 10% of all diabetics are children.

> Diabetes is an inherited disease caused by the malfunctioning of the insulin-secreting cells in the pancreas; the body is thereby robbed of a major source of energy. Mild cases can be controlled by diet and exercise; more serious cases are controlled by daily injections or oral consumption of insulin. (Vannier 1977, p. 120)

Regulated exercise -- as prescribed by the individual's physician -- is important in the control of diabetes, because it helps to control weight and contribute to fitness. The diabetic can take part in most activities, but care must be taken to avoid fatigue.

(vii) Epilepsy

Perhaps one of the most misunderstood of diseases, epilepsy "is a symptom of a brain disorder, consisting of seizures (also called convulsions)" (Willard 1978, p. 24). It may be caused by anything that affects the metabolism of the brain cells (e.g., faulty brain development before birth, brain injury during birth, head injuries, brain tumours, faulty blood circulation, certain metabolic disorders). The three main types of seizures are:

(1) grand mal ("big sickness"): gross twitching convulsions in which the person becomes unconscious for 2 to 5 minutes;

(2) petit mal ("little sickness"): a blank stare or rapid eye-blinking usually lasting less than a minute; often mistaken for daydreaming; and

(3) psychomotor: repeated inappropriate actions (e.g., mumbling, tapping his/her thighs repeatedly, swallowing repeatedly) lasting 2 to 5 minutes.

Usually, the person does not remember what happened. Medication may completely control the seizures or may only reduce the number and frequency. While some epileptics may have additional disabilities (e.g., cerebral palsy, mental retardation), it is important to note that in general epilepsy does not affect intelligence. Nevertheless, epileptics are often labelled as being "retarded" because of the seizures. The problem is compounded by overprotectiveness by parents and others.

Play and recreation personnel should be aware of any children having epilepsy and should be able to administer first aid in the event of seizure. Children with controllable epilepsy can participate in most activities. If the epilepsy is not controllable, activities which could cause serious injury if consciousness were lost (e.g., rope-climbing) should be avoided.

MENTAL RETARDATION

The United States President's Panel on Retardation gave the following definition:

> The mentally retarded are children or adults, who as a result of inadequately developed intelligence, are significantly impaired in their ability to learn and adapt to the demands of society. (Willard 1978, p. 37)

The causes of mental retardation may be classified as follows:

> 1. Organic -- May happen before, during, or after birth or be caused by accident, diseases, or damaging toxic conditions.
> 2. Genetic -- May be inherited from one or both parents' genetic deviations. The most common diagnosed forms are classified as (a) mongolism (known as Downs Syndrome), (b) phenylketonuria (PKU), and (c) familial retardation.
> 3. Cultural -- Caused by malnutrition of the mother during the prenatal period or of the child after birth, as well as by deprived environmental conditions due to poverty and other socioeconomic causes. (Vannier 1977, p. 39)

The mentally-retarded have been classified in a variety of ways, most frequently in terms of intelligence, as measured by the "intelligence quotient" (IQ). There is, however, a great deal of disagreement on the various categories, labels, and levels of IQ used. To avoid this disagreement, a more general breakdown of "severe/profound" and "moderate/mild" will be used here.

The severely- and profoundly-retarded require total care and close supervision. There is little possibility for recreational activity; motor and muscular activities are most appropriate, including crawling, rolling, walking up and down stairs, running, grasping of objects with the hand, throwing, catching, balancing, jumping off objects, stepping over and into objects, bouncing, climbing, and kicking (Fait 1972, p. 206).

The moderately- and mildly-retarded are able to participate in a wide range of activities; however, a prerequisite to social integration is that they need to develop the skills necessary to enable them to seek or provide their own recreation when they are placed in the community. In the selection of an activity, it is important to consider the mental and physical disabilities and the chronological age of the individual in order that the activity may be age- and ability-appropriate (Shivers and Fait 1975, p. 236).

In addition to problems created by mental deficiency per se, there are also difficulties resulting from the social setting. The retarded child has difficulties in interpersonal relationships, immature self-control, and problems in communications (Hayes 1977, pp. 83-84), all of which are intensified by the lack of social interaction and the level of expectation placed upon the child:

> Even severely retarded persons appear to be responsive

> to variations to incentive conditions; social reinforcement in the form of social praise, verbal praise and encouragement, or just simple attention appears to be at least as effective as with normal persons. There is a strong suggestion that the performance of retardates may be depressed as a function of generalized expectations of failure and that proportionally more retarded than normals may respond to the threat of failure with decreased rather than increased effort. (Dexter 1958, p. 925)

This lack of social interaction is fostered by intense parent-child relationships which prolong the child's dependency and isolation from a peer group (Robinson and Robinson 1965, p. 506). It is frequently important, therefore, that opportunities be structured to provide social experiences for the retarded which the non-retarded take for granted (Hayes 1977, p. 84).

The mentally-retarded are largely viewed with a focus on the lack of cognitive functioning (intelligence) and with the thought that intelligence and motor function are entirely separate. As a result, the physical capabilities of the mentally retarded are relegated to a place of little importance; therefore, problems of motor performance of the mentally-retarded are underestimated and the potential for growth remains unrecognized (Bowers 1969, p. 1). Research has shown that the physical performance of mentally-retarded children is 2-4 years behind that of normal children of the same chronological age, but that the motor development patterns of the mentally-retarded followed closely those of normal children, just being behind in terms of chronological age (Campbell 1973; Francis and Ravick 1959; Ravick et al. 1967). There is, however, a great range in the physical abilities of the mentally-retarded, with motor performance generally being greater the higher the IQ; the exception is children with Downs Syndrome who frequently have high levels of motor performance despite low IQs (Cratty 1966).

The physical performance of the mentally-retarded can be greatly improved with a suitable physical education, recreation, and play programme (Corder 1966; Oliver 1958; Solomon and Pangle 1967). The objective of such a programme, therefore, should focus on:

(1) motor performance: body awareness, spatial relationships, balance, basic locomotive skills, hand-eye coordination, skills of games and sports, and perceptual-motor development; and

(2) social performance: self-concept, self-confidence, and sociability (Bowers 1969, p. 5).

The exact nature of such a programme, however, will have to be designed with the characteristics of the particular person taken into account. While it is true that there is generally an improvement in developmental levels with increasing age, there is also a great deal of individual variation. Hayes (1977, pp. 85-87) provides a general overview of the physical, social, and mental traits of mentally retarded children and shows how they develop over time; a summary is provided below.

Mentally-retarded children of 5, 6, and 7 years of age are slow to develop physically in terms of the control and co-ordination of fine muscles, wrists, hands, and fingers. They are readily able to walk, run, and jump, but skipping is acquired slowly. Their level of mental development is approximately that of a non-retarded 3-5 year-old child, with a level of language and vocabulary 25-50% below normal. Their slower perception and association ability affects the quality and quantity of concepts and ideas and they are generally not curious or persistent in questions. Their sense of time is developing, but they are more interested in "now" than in the future. In social terms, they tend to play as individuals if the opportunity for and specific guidance in play with others is not given. They will share toys, but their interests are self-centred and they have little, if any, sense of imagination. When playing in groups, they are followers. As they get older, there is more role-playing, group activities, singing, and rhythm. They are slow to develop self-criticism; therefore, they look for approval and are pleased with any comment of praise, but are extremely sensitive to censure or adverse comments about or to them.

Mentally-retarded children of 8, 9, and 10 years of age have well-developed muscular control of limbs and fairly well-developed fine muscle control, but slightly less than normal control of hands. They have the mental development of the normal 5-7 year-old child, with a vocabulary 25-30% below a normal 8-year old standard. At age 8, the weakness of the power of association -- which is fundamental to language development -- is noticeable. By age 10, they have more ability to associate, but their development is slow. Activity, particularly manipulative activity, continues to satisfy and there is a greater interest in thinking and talking about activities. The level of expression in play or conversation is less than normal. In social terms, there is a transition to social groups. Suggestion and imitation dominate in conduct and play, but the ego is too dominant to allow for being a "good sport." Make-believe play is important, particularly with familiar objects and they enjoy stories and music. The distinction between true and imaginative stories is appreciated.

Quite clearly, the design of a play programme for a mentally-retarded child involves many factors in choosing an appropriate activity: social interaction, cognitive processes, perceptual awareness, emotional responsiveness, and physical fitness (Ibid., pp. 96-97). An extensive list of suggestions can be made which take into account the psychomotor, perceptual, sensory, and motor coordination problems of the mentally-retarded (Ibid., pp. 98-99; Grove and Keeran 1969; Shivers and Fait 1975, pp. 237-238; Vannier 1977, pp. 40-41; Willard 1978, pp. 38-40):

(1) reduce the activity to its basic elements, with rules and regulations being as simple as possible and new ones being introduced slowly and only when important;

(2) reduce the choices that must be made to as few as possible;

(3) ensure that there is a maximum repetition of instructions, the particular activities, and movements within activities;

(4) demonstrate as much as possible and use as few words as possible (because the mentally-retarded learn best by imitation), but name the skill or movement in order to improve vocabulary;

(5) provide a slow progression of difficulty and a smooth transition from one activity to another in order to avoid confusion;

(6) select problem-solving activities that have simple solutions or in which the solution to different problems is the same;

(7) provide a variety of activities, because the children will have short attention spans and different developmental levels;

(8) limit complex motor-skill requirements and stress large-motor movement activities involving locomotion, manipulation, and stability movements;

(9) provide equipment that is at the children's level of use;

(10) provide enough equipment so there is no standing in lines to wait for a turn;

(11) provide solitary or small-scale activities in which the emphasis is on individual and not team success;

(12) assure the participant that the quality of the performance brings no penalty;

(13) provide opportunities for fun, success, and praise, so that there will be enough pleasure to motivate them to want to participate on their own and for their own enjoyment;

(14) let the children repeat successful experiences several times in order to enjoy the feeling of accomplishment;

(15) use help sparingly and give suitable amounts of time for task completion, as self-satisfaction is very important;

(16) use discipline when appropriate, as when there is danger to participants, extreme destruction of equipment, or the possibility of the programme being totally disrupted;

(17) maintain, when possible, the same personnel in the activity; the staff should be well-trained and should be encouraged to join in the activities and to wear appropriate clothing;

(18) reward accomplishment, no matter how small, with praise.

Many of these suggestions are particularly appropriate to playground opportunities, particularly the freedom for individual development and success and the lack of rules and pressure for success. Despite the fact that few of the mentally-retarded will have limiting physical disorders, opportunities will be needed to develop gross-motor coordination, muscular endurance, and body strength (especially the arms and legs). It will be necessary in many cases, however, to provide skill-upgrading opportunities because many of the children will lack the knowledge and skill to climb, swing, slide, grasp and hold objects, play with other children, take turns, watch for others, etc.

Recently, task analysis and contingent reinforcement has been used successfully to teach retarded children a variety of physical activities, including:

(1) the use of playground equipment (Keeran et al. 1969);

(2) rolling a ball, riding a sliding board, riding a tricycle, and jumping on a trampoline (Wehman and Marchant 1977);

(3) swimming (Bundschuh et al. 1972);

(4) bowling (Seaman 1975);

(5) exercises (Wehman et al. 1978).

It is possible, therefore, to teach a variety of physical skills to the retarded; the next step would appear to be to teach social skills and competencies as, for example, in integrated play settings.

MENTAL ILLNESS

Mental illness refers both to the degrees of inappropriate behaviour and the duration or persistence of behaving in such a manner. One must be cautious, however, of defining mental illness on the the basis of social adjustment level because of the extent to which non-conforming behaviour is the result of learning rather than illness per se (Mechanic 1969, pp. 1-5; Meyer 1977, p. 137). There is no universally-accepted definition of what constitutes a person with a mental illness or an emotional disturbance (Willard

1978, p. 22). They are encompassing terms which include such diagnoses as hyperactive, neurologically-impaired, phobias, psychoses, and behaviour disorders and such causes as malnutrition, chemical imbalance, neurological impairment of genetic origin, injury, illness, and psychiatrically-determined factors (Poindexter 1969, p. 15).

The mentally-ill can be divided into the following general categories:

(1) functional psychoses: schizophrenia, manic-depressive psychosis, involutional reactions, paranoid conditions;

(2) organic conditions: acute and chronic brain disturbances accompanied by abnormal behaviour;

(3) mental deficiency: the feeble-minded;

(4) conduct disorders: the "acting out" of adjustments and personality disorders;

(5) psychoneuroses: phobias, compulsions, conversion, hysteria; and

(6) psychosomatic disorders: individuals who are not mentally ill or greatly emotionally-disturbed, but who do have physical conditions (e.g., high blood pressure, ulcers, asthma, allergic conditions) caused by worry, tension, the environment in which they live, or a combination of any of these factors (Vannier 1977, p. 89).

Children with mental illness may: be unhappy and insecure within themselves; have poor relationships with other people and with their environment; have excessive hostility, fears or fantasy life; and evidence too many non-organic physical complaints or too little control over their bodily functions without organic cause. The psychiatric diagnoses may include such symptoms as: extreme difficulties in the learning process; gross inability to socialize; very poor self-concept; evidence of neuroses or phobias; and inability to work toward or reach intellectual potential. Physical characteristics may include: learning disabilities; clumsy and awkward movement patterns; lower strength, power, agility, coordination, balance, and speed. Three types of behaviour are common: aggressiveness (verbal and/or physical); withdrawal (very shy and quiet); and manipulation. These conditions, however, are not necessarily permanent and are more modifiable than other conditions and disabilities (Poindexter 1969, pp. 15-19).

Willard (1978, p. 22) describes the general condition of children with mental illness:

> These children have difficulty with interpersonal relationships. They are unable to establish and

> maintain friendships, and are unable to play co-operatively with other children. They may lack social skills, and may be unable to conform to peer and group expectations. Their behavior often sets them apart as being "different", and causes rejections by their peers.

The importance of play as part of a therapeutic programme for the mentally-ill person has long been recognized:

> Through play the abnormal as well as the normal can find their needs for love and security fulfilled. Through play they can also learn how to replace reality escape mechanisms such as regression, introversion, segregation, rationalization, dissociation, or projection with a more positive type of behaviour through which is gained greater self-control, self-realization, and personal insight. (Vannier 1977, p. 91)

The choice of appropriate activities must be based on the individual's requirements, but in general there should be both group and solitary activities. Group activities will tend to improve social skills and interaction, while solitary ones aid individual skills and success (Shivers and Fait 1975). Any programme, however, requires trained leaders, reward, discipline, consistency, fun, and success (Willard 1978, pp. 23-24).

LEARNING DISABILITIES

Learning disabilities constitute a category of dysfunctions quite distinct from other disabilities.

> The term "learning disability" covers a specific group of children who have a wide range of learning problems. They have average to above average intelligence, but are not functioning at that level because of perceptual, conceptual or motor difficulties....(It) does not include learning problems resulting primarily from mental retardation, visual, hearing or motor handicaps, emotional disturbances or environmental disadvantage. The common element to all learning disabled children is their difficulty learning. (Willard 1978, p. 31)

Each child may have a few, many or all of the following characteristics:

(1) abnormal motor activity levels: hyperactivity;
(2) perceptual-motor impairments: difficulties in movement, sight, hearing, touch, taste, and smell;
(3) emotional unpredictability;
(4) disorders of attention: short attention span, easily distracted, unfocussed attention, continuous repetition of action or phrase;
(5) impulsiveness;
(6) disorders of memory and thinking: forgetfulness, inability to remember or follow instructions;
(7) specific learning disabilities in one or more areas of reading, writing, arithmetic, language or spelling;
(8) disorders of speech and hearing: slow development, difficulties in understanding and expression (Willard 1978, pp. 31-32).

Such children often have extreme difficulty in dealing with their learning disabilities and may adopt a variety of forms of behaviour: withdrawal, anger, aggression, "clown."

> Regardless of how they react, most children with learning disabilities have very few friends, and have difficulty interacting in social situations. Often, the child is described as socially immature, rude, showoff, and attention-seeking. (Ibid., p. 32)

These children need opportunies to develop personal learning skills, along with socialization opportunities. Play leaders must be skilled at dealing with the particular difficulties and be consistent and caring. Discipline is necessary, but should not be used in the event of behaviour which the child cannot help or control (e.g., clumsiness, hyperactivity, short attention span).

MULTIPLE DISABILITIES

As was noted above for the deaf-blind child, the child with multiple disabilities may present the greatest challenge in attempts to provide meaningful play and recreation experiences. The range of possible combinations of disabilities is very great and precludes a discussion here. Experience in many settings, however, has shown that it is possible to serve children with such difficulties and to improve their lives and increase their developmental levels. It frequently does require, however, a highly-skilled staff with a wide array of support services, including medical personnel, family, transportation systems, special service agencies, and the community in general.

CHAPTER 5: BARRIERS TO INTEGRATION

INTRODUCTION

Hutchison and Lord (1979, pp. 16-23) note six barriers to integration:

(1) society's negative attitudes towards differentness;
(2) the low priority given to recreation and leisure;
(3) recreation being seen as therapy;
(4) lack of support services;
(5) inadequate leadership and inappropriate programmes;
(6) dead-end segregated services.

A review of the literature and the results of this research project suggest a seventh major barrier to integration:

(7) parents.

The following sections will examine each of these barriers.

SOCIETY'S NEGATIVE ATTITUDES TOWARDS DIFFERENTNESS

Historical attitudes have tended to involve negative role perceptions of devalued people largely in terms of fear or pity (Wolfensberger 1972). Fortunately, there seems to be an emerging alternative view of developing human beings with a focus on ability, not disability.

On the whole, however, society has a low tolerance for individual differences. Emphasis is placed on conformity, physical beauty, competitiveness, and success; it may be neither possible nor desirable for many people to respond to these demands. The results are:

(1) labelling, with a focus on disability and not ability and on generalizations about the whole person;
(2) segregation, in the name of rehabilitation;
(3) accentuation the differences;
(4) rejection, which results in further segregation and isolation.

As a consequence, physical disability becomes social handicap, which prevents the development of self-confidence and involvement in the community. This pattern is quite common in the leisure service delivery system. From a legal and moral point of view, however, it is incumbent upon both professionals and volunteers dealing with the disabled to understand and accept individual differences and to foster integrated community-based experiences. Attitudinal change is also required on the part of the non-disabled, who should be more supportive and accepting of individual differences (M. L.

Hutchison 1975, p. 62).

RECREATION AND LEISURE: A LOW PRIORITY

Many community leisure agencies do not consider it their responsibility to deal with the disabled. They provide a number of reasons for such a stance:

(1) they feel uncomfortable dealing with the disabled;

(2) they say it is the responsibility of voluntary advocacy associations (Hutchison and Lord 1979, p. 17);

(3) they realize that many recreation practitioners are simply incompetent to deal even with a non-disabled population;

(4) they feel that specialized personnel are required and that they lack them;

(5) they have insufficient funds even for their "primary mandate," the non-disabled population;

(6) they have poorly-designed and -equipped facilities for serving the disabled;

(7) there will be a public outcry at having to be integrated;

(8) there is public apathy about the disabled; and

(9) they are unwilling to investigate or attempt to understand the needs of the disabled (Shivers and Fait 1975, pp. 51-52).

Frequently, municipal leisure agencies recognize and accept the responsibility for developing services for the disabled, but find themselves unable to provide the necessary services because of the lack of money and adequately-trained professional personnel (Edginton et al. 1975; Hayes 1969; Lancaster 1976).

In most jurisdictions -- and certainly in Ontario -- it is the legal responsibility of municipal leisure agencies to provide opportunities for all persons who reside in the community. There is, however, a general failure to respond to the needs of the disabled or to foster a climate of acceptance and enlightened understanding concerning the disabled. Shivers and Fait (1975, pp. 53-54) state quite forcefully that

> It is incumbent upon recreationists in all circumstances, but particularly in community or public recreational agencies to stop supporting the ignorance of society and to begin advocating valid reasons for offering opportunities and services to all. The primary principle upon which the field of recreational service is founded is that of provision of recreational service to all people, not just to all

> people who are sound in mind and body or who have the personal resources to get along without any special assistance whatsoever. This most basic of all principles means what it says -- service to all, whatever their condition, wherever they may be found, at whatever level they are functioning. If they reside in the community, then the community and the agencies which represent it must function to provide continuing services designed to enhance the lives which they touch.

Such agencies must also come to realize that the disabled are the perfect clients for the public field to serve (Frye and Peters 1972, p. 159) because of the lack of competing interests, the great marginal benefits to be derived in terms of developmental potential, and the suitablity of the services provided for their individual benefit.

In order to evaluate the present state of services provided for the disabled, a municipal leisure agency should undertake a community needs assessment, consisting of the following steps:

(1) investigate recreational services presently in existence for both the disabled and non-disabled;

(2) determine the community's willingness to include the disabled in recreation programmes;

(3) survey the professional background and attitudes of community recreation personnel concerning the disabled;

(4) identify activities presently engaged-in by the disabled and those in which they would like to participate; and

(5) evaluate community recreation competencies for serving the disabled (Bates and Renzaglia 1979, p. 107).

It may then be necessary to undertake an internal programme to educate professional personnel about the disabled and their needs and abilities. It might include substantial changes in attitudes and approaches. For example, professional recreationists frequently emphasize the norms and standard scores of standardized measurement instruments or tests rather than the skills and gains of the individual (J. V. Stein 1977). Such approaches are not appropriate when dealing with disabled persons. (This conclusion, of course, begs the question of whether or not such approaches are appropriate for many non-disabled persons as well.) Recreationists would have to be provided with information pertinent to the abilities of the disabled individual and create individualized training and skill development programmes, perhaps using competency checklists and interest inventories.

Low priority being given to play, leisure, and recreation

is also a characteristic of many voluntary advocacy associations, which tend to have a very narrow interpretation of appropriate activities, frequently including only such traditional choices as swimming, bowling, and skating. Also, there is often the concern that the disabled will not cope well with integrated experiences in the community. This is not to say, however, that such agencies are not important. They serve many valuable functions, including residential, vocational, and educational services, but there is frequently a lack of interest in play, leisure, and recreation, except in the purely therapeutic sense (Hutchison and Lord 1979, p. 19).

It is also suggested that many advocacy agencies are simply unable to devote much of their attention to play, leisure, and recreation because their efforts are focussed on other services. One way to deal with such a situation would be to increase inter-agency co-operation (Witt 1974) in such areas as policy development, service planning, utilization of community resources, programme and personnel standards, staff training, research, and the recruitment, training, and utilization of volunteers:

> A common goal for all voluntary organizations in the development of recreation services for disabled and disadvantaged persons which makes inter-agency co-operation both feasible and beneficial is the enabling of individuals to develop leisure, recreational, and social relationships within its community in as fully normal a way as possible; a way determined by each individual's own needs and abilities rather than by preconceived attitudes towards his ability. (Melchers 1977, p. 75)

The achievement of this common goal would require the adoption of a set of objectives:

> 1) Public education campaigns encouraging positive attitudes towards disabled persons in integrated settings.
> 2) Programs providing economic security to persons with disabilites enabling them to have equal access to the recreational opportunities of their communities, regardless of ability to earn.
> 3) The institution of transportation services in the community at costs relative to the economic position of the individual, thus allowing equal opportunity to all for participation in the activities which make up community life.
> 4) The elimination of environmental barriers to persons with disabilites and the design of safe and

> accessible environments with the needs of all people in mind.
> 5) Greater access to information regarding the recreational opportunities available in the community and increased awareness of the disabled person as a user of commercial recreation.
> 6) Education and in-service training for professionals, volunteers and other groups in community recreation to enable them to respond appropriately to the disabled user of recreation services.
> 7) The development of sheltered and rehabilitation programs to assist disabled individuals to obtain the necessary skills and confidence to participate in community life, including standards of policy, programs and personnel.
> 8) The support and development of programs to meet the needs of severely disabled individuals unable to participate in community life as it exists in most communities. (Melchers 1977, p.76)

RECREATION BEING SEEN AS THERAPY

At the heart of the problem with many municipal leisure agencies and voluntary advocate agencies is a failure to recognize the importance in developmental terms of play, leisure, and recreation for the disabled individual in general and the disabled child in particular:

> It is quite apparent that it will take time until everybody concerned comes to realize that recreation activities are an effective form of therapeutics and prophylaxis. (Wolffe 1957, p. 13)

The problem is compounded by entrenched professionalism: "experts" know best and they rarely share information and knowledge; stereotyping of clients continues, with labels and categories abounding; there is frequently a narrow training base for professionals and volunteers; and a primary goal of many agencies is the quantitative expansion of services, rather than the provision of meaningful assistance to disabled individuals (Hutchison and Lord 1979, p. 20).

The disabled should become aware of their rights to adequate leisure services from municipal and voluntary advocacy agencies. There is a definite need for leisure education and leisure counselling to assist the disabled in forming more positive attitudes towards themselves and in

participating in recreation and play programmes with the non-disabled (M. L. Hutchison 1975, p. 62).

LACK OF SUPPORT SERVICES

Most Canadian municipal parks and recreation departments place low priority on leisure counselling and special populations (Edginton 1979), as evidenced by:

(1) lack of money spent on the disabled;
(2) lack of programmes and facilities for the disabled;
(3) lack of accessible facilities;
(4) lack of adequate transportation;
(5) lack of available advocates, volunteers, and other support persons to assist participants in programs and experiences; and
(6) lack of leisure education (Hutchison and Lord 1979, pp. 21-22).

Leisure education is particularly important for the disabled because many have never been involved in community experiences; they lack the confidence to make leisure choices; they may not know what is available; and they are often unaware of their right to become involved. Upgrading experiences or "entry" programmes are often necessary.

INADEQUATE LEADERSHIP AND INAPPROPRIATE PROGRAMMES

Inadequate leadership -- in terms of both quantity and quality -- can make participation unattractive and unrealistic for many people. Frequently, leadership practices are characterized by professionalism (in the negative sense), hierarchical structures, and specialization. There is little opportunity for participation by the people being served, whether that participation is in planning, co-operation, or operation. Too often, professionals are pre-occupied with curricula, budgets, skills, and tasks rather than the personal needs of group members, co-operation, co-ordination, and development of meaningful goals and opportunities (Hutchison and Lord 1979, p. 23). Buber (1951, pp. 18-20) makes this point by describing the importance of the professional -- in this case, the teacher -- in play:

> ...it requires a skilled guiding hand, especially where children are collected in groups as they are in schools. There is a way of setting the stage and creating an atmosphere for spontaneous play. Most important in this atmosphere is the teacher's

> sensitive understanding of her own role. Sometime the teacher needs to be ready to guide the play, especially among the fives, sixes, and sevens, into channels that are beyond the nursery years. But she must guide only in terms of her choice of stories, materials, trips, experiences. It may function through discussions. Without skillful guidance, a free play program for successive years can become stultified and disturbing for children.

The adoption of such a supportive process requires that professionals need to be helped to know how much, when, and how to get involved in the children's play; the professional cannot be allowed to take over the play (Weininger 1980, p. 48).

Pomeroy (1974, p. 52) stresses the importance of leadership in recreation programmes:

> Qualified leadership has long been recognized as the most essential element in a successful community recreation program....(T)he employment of untrained, incompetent workers is certain to result in disappointment and failure of the program. An agency or group planning to establish a recreation program for the handicapped is faced by no more important task than the selection of qualified leadership personnel.

This opinion has been supported by experience with disabled children and adventure playgrounds, which has shown that the equipment and the site are of less importance in ensuring success than the quality of the leadership since without support and guidance the children may not use the facility fully.

Pomeroy (1974, p. 53) goes on to state that the successful leader should:

> Accept the handicapped person first as an individual who has the same basic needs, desires, and problems as other people....
>
> Maintaining a sympathetic understanding of each person's handicap, but not indulge in pity....
>
> Demonstrate a capacity for patience, imagination, and ingenuity.
>
> Recognize and be able to meet the specific and immediate social and recreational needs of the individual....
>
> Help the handicapped to help themselves....
>
> Be willing to do menial tasks such as feeding and

> lifting the handicapped, toileting, and handling wheel chairs and portable beds....

The personal qualities of a good leader include: emotional stability; self-confidence and security; patience, tolerance, and understanding; stamina and physical energy; ingenuity and imagination; selflessness; responsibility; mature judgement; enthusiasm; and a sense of humor (Pomeroy 1974, p. 54). Frequently, comments have been made that one of the most serious problems that disabled children face is over-protective parents; it is important that leaders must not exacerbate this problem:

> Leaders must not over-protect the handicapped or show different treatment of them that could be interpreted as favoritism by the nonhandicapped. The presence of a handicapped child frequently slows down a group and prevents a more active program. In some instances, it might be appropriate to slow down activity, but it should not be done at the expense of the nonhandicapped. Leaders must understand how to fit handicapped persons into regular programs rather than to avoid those activities which are difficult for them.
>
> The successful integration of handicapped persons is determined by many elements; however, of primary importance is the attitude and understanding of leaders. (Ibid., p. 95)

Inappropriate programmes are also a serious barrier to successful integration. Many current programmes are competitive, formal, and skill-oriented, instead of being developmental and humanistic, allowing all persons to participate at their own level (Hutchison and Lord 1979, p. 23). There is also a tendency for many leaders to dominate, particularly with children:

> ...play and choice are critical for fostering individuality and creativity.
>
> The play provider must be conscious about not interfering in the process of play. The leader must act as a facilitator, arranging the setting to encourage play. When individuals are having difficulty, it is then appropriate for the facilitator to assist, guide, problem-solve and possibly even train. (Ibid., p. 62)

Until such difficulties arise, the leader should let the play progress and unfold as an uninterrupted process.

DEAD-END SEGREGATED SERVICES

In general, many segregated programmes can be described as being over-protective and as having lower expectations and low risk-taking. Too many segregated programmes are end-points; they do not provide stepping stones for involvement in more integrated community experiences. Instead, the primary goal of segregated programmes should be to provide opportunities to acquire personal and physical skills as prerequisites for community involvement and integration; rarely is this the case (Hutchison and Lord 1979, p. 24).

One important aspect of the lack of bridging opportunities from segregated to integrated experiences is the emphasis in many segregated programmes on activities which are inappropriate for personal development. The most frequent problem is that of age-inappropriate activities (White 1974). For example, a segregated programme that teaches mentally-retarded teenagers arts and crafts skills which are appropriate to younger children may provide them with important physical and/or cognitive skills, but does not provide them with social skills that are necessary for community-based, integrated programmes.

PARENTS

It would appear that many parents -- of the disabled and the non-disabled -- do not appreciate the importance of play in the development of their children (Copeland and Golden 1979) and its particular importance for disabled children (Guerney 1979). Sugiyama (1978) argues that the parents of the non-disabled and the disabled are the largest barrier to integration. They both have children whom they wish to protect from unpleasant experiences; and they may be generally and genuinely apprehensive, if not afraid. The parents are afraid of many things, but mainly of the unknown.

On the one side, the parents of the disabled are frequently over-protective because of the child's disability per se and of lack of experience with social settings. They find it difficult to expose the child to an apparently rough and ready atmosphere in an integrated programme in which the child may be physically or emotionally "hurt" (Allen 1975, p. 3). On the other hand, the parents of the non-disabled often fear disabled children because of misinformation, lack of

information, and myths about disabilities. There is also a concern that integrated programmes will result in their child being slowed-down because the disabled children will not be able to keep up with the pace of activity. There is obviously a need here for education programmes to inform both sets of parents about the nature, limits, and potential of disabled children. This situation with parents also serves to underscore the importance of qualified leadership.

Perhaps one way to begin to overcome this barrier is to integrate the parents by letting them participate in planning, organizing, and operating facilities and programmes, thereby meeting each other, sharing their concerns, and encouraging further integration. Parents should also come to realize that they must encourage and reinforce continued participation in play programmes, for children may soon become discouraged and uninterested if there is no encouragement (Bates and Renzaglia 1979, p. 121). It must be realized that behaviours acquired by the disabled in one environment do not necessarily occur when the environmental conditions have been altered significantly; for example, social skills developed at an adventure playground will not necessarily be carried automatically back into the home environment unless there is a similar level of feedback, personal freedom, and achievement. The ideal way to maintain recreational skills is to provide individuals with opportunities that are so enjoyable that they are eager to engage in these activities without external prompting or encouragement (Wehman 1977).

CHAPTER 6: THE PROCESSES OF DEVELOPMENTAL AND ADAPTIVE PROGRAMMING FOR THE INTEGRATION OF PLAY ENVIRONMENTS

INTRODUCTION

Hutchison and Lord (1979, p. 67) argue that there are two basic approaches to integration. One -- developmental programming -- focusses on the process of individual human development and the application of programming techniques to foster that development. The other -- adaptive programming -- deals with the changes that are necessary in "normal" programmes, facilities, and environments to allow disabled persons to utilize them. These processes are first utilized in the upgrading phase of integration and then have implications for the education and participation phases.

THE UPGRADING PHASE

(A) DEVELOPMENTAL PROGRAMMING

A common error in the establishment of a recreation-oriented developmental programme is the failure to understand and assess individual human development and human needs. There are four important elements which should be taken into account:

(1) all persons go through similar developmental stages characterized by certain motor, cognitive, and moral understandings which are reflected in movement, language, and behaviour;

(2) people proceed through these developmental stages as a result of experience and by the internal stimulus-seeking of the individual; play, activity, exploration, and social interaction are critical components of this experience;

(3) all people share certain human needs: security, belonging, care, risk, understanding, self-actualization, competency;

(4) all of these factors must be taken into account when analyzing an individual's stage of development and deciding how to facilitate further growth and development (Hutchison and Lord 1979, pp. 54-55).

The adoption of such a philosophy implies that programmes can no longer be measured by the work and effort of the staff involved, but must be evaluated on the basis of changes in and the development of participants (Edginton and Hayes 1976).

Programmes, therefore, must be planned in the light of certain objectives:

(1) a focus on skill and development;
(2) long-term, not short-term planning;
(3) humanistic, developmental, and action-oriented approaches;
(4) a focus on behaviours or feelings which are as observable and measurable as possible (Hutchison and Lord 1979, p. 57).

It is obvious that such objectives are especially valid when applied to children and play. Play involves the attainment of personal skills and development that have long-term implications for the child as a human being. The nature of the play experience itself provides many opportunities for the use of humanistic, developmental, and action-oriented approaches and also involves a wide range of observable (e.g., social interaction) and measurable (e.g., physical fitness) behaviours and feelings. The problem in designing a play experience is to maximize the potential for the attainment of these objectives.

Developmental programming is the adherence to a process which enhances the learning and development of participants. It assumes that people develop and learn at different rates; therefore, the focus is on the individual as a developing human being. It is based on a number of principles:

> A. A strong positive relationship between the leader and participant helps maximize the impact of caring and modelling on the participant's development....
> B. Viewing the participant as a whole human being with strengths and weaknesses allows the leader to build upon strengths and give support as needed to other aspects of development....
> C. Experiences which are individualized, without competition, provide success for the individual at his/her own developmental level....
> D. Participants are encouraged to make conscious choices....
> E. Play and training are utilized in order to encourage either a variety of responses or precise responses where appropriate....
> F. Developmental sequences and task analysis enable individuals to learn a variety of personal, physical, and recreational skills.... (Hutchison and Lord 1979, pp. 59-62)

Adoption of such a process implies that the following characteristics are necessary for the creation of feasible settings for integration:

(1) small groups;
(2) developmental opportunities;
(3) individually-oriented and non-competitive;
(4) provision of people supports;
(5) prepared leadership;
(6) physically and functionally accessible; and
(7) on-going individualized evaluation (Hutchison and Lord 1979, p. 66).

Again, it is apparent that these characteristics are well-suited to play experiences:

(1) small groups of children are usually involved;
(2) there is great potential for developmental opportunities through the provision of a variety of experiences and media along a graduated scale of difficulty;
(3) activities are usually individually-oriented and non-competitive;
(4) people supports can be provided by other participants, leaders or outside volunteers;
(5) prepared leadership is frequently provided; and
(6) there is the potential, at least, for on-going individualized evaluation of the progress of each child.

(B) ADAPTIVE PROGRAMMING

Adaptive recreation programming is

> ...the adjustment or modification of the activities, the facilities and/or the programming of the community recreational services in any way necessary to enable the handicapped person to participate successfully. (Shivers and Fait 1975, p. 51)

Following Hutchison and Lord's model of integration, such adaptations should begin with segregated and upgrading settings. The following guidelines should be used in assessing such situations:

(1) the upgrading experience should occur in facilities where there is potential for social integration (e.g., a community centre versus a rehabilitation centre);
(2) activities should be age-appropriate;
(3) non-stigmatizing names should be used (e.g., "developmental programming" versus "programme for the handicapped");
(4) if the programme is segregated, it should include only one disability, not a mix of disabilities, in order to avoid public confusion; and
(5) small groups of people in segregated experiences in the community minimize the deviancy image created

(Wolfensberger and Glenn 1972).

There are four primary concerns in providing adapted programmes (Hutchison and Lord 1979, pp. 68-71). The first is that the focus should be on co-operation rather than competition in order to include all people (Orlick 1978a, 1978b) and to take into consideration the personality characteristics of many disabled persons which make competition inappropriate. The second is that there should be a focus on facilitating social interaction, in order to overcome the "social handicaps" which face most disabled persons. There are several strategies which can be adopted to facilitate social interaction:

(1) structure of the activity: use activities which require cooperation for successful involvement;

(2) selection of materials and equipment: use "social" materials rather than "isolate" materials (e.g., jungle gym versus tricycle);

(3) group dynamics and group process: use simple exercises and activities for people to meet each other, dialogue and discussion, and problem-solving approaches; and

(4) participant and peer involvement: use peers as formal or informal models, participants to teach other participants, and advocates to serve as friends and partners (Hutchison and Lord 1979, p. 68).

The third concern is that facilities and outdoor spaces must be both physically and functionally accessible. Fourth, transportation must be available and accessible.

More detailed and precise adaptations should, however, be provided with respect to programmes and equipment:

> (1) Substitution of a different body position than is normally used, for example, lying or semi-reclining rather than sitting to play checkers or sitting rather than standing to play shuffleboard.
> (2) Substitution of slower movements for faster movements such as walking for running.
> (3) Modification of the equipment such as attaching a string to a ball so that it may be retrieved by one unable to chase it.
> (4) Developing new techniques for accomplishing the activity such as changing two-handed skills to one hand or even to the feet or teeth.
> (5) Utilizing certain aids to increase the restricted abilities of the handicapped as, for example, using a loud speaker to amplify music for recreational listening by one who is hard of hearing.
> (6) Assisting with part of the skill as in the case of...taping the awl while it is held in place by the

handicapped leather tooler.
(7) Simplifying the activity, for example, completing the difficult portion of a puzzle before giving it to the mentally handicapped player to finish.
(8) Decreasing distances, for example, reducing the size of the court on which a game is played.
(9) Providing more frequent rest periods in a vigorous activity than are normally required.
(10) Supplying visual, tactile, and kinesthetic cues to the player. (Shivers and Fait 1975, pp. 228-229)

While the above points give an indication of the types of adaptations that are possible, a more detailed analysis of the adaptations needed specifically for play environments is provided below.

The goal of upgrading experiences is to foster "transfer" which occurs when a person learns a skill, concept or behaviour in one setting and then is able to apply it in another situation. Transfer is enhanced when experiences and activities in segregated or upgrading experiences are meaningful and relevant for the participants. With segregated programmes, the situations need to be similar to potential settings for integration in order to improve transfer. The emphasis, however, should be on meaningful generalizations (e.g., fitness, creativity) rather than on specific skills in order to develop self-confidence aand self-awareness, both of which are necessary for successful integrated experiences (P. Hutchison 1975). The emphasis in play environments on such meaningful generalizations rather than on specific skills make ideal settings for integration.

THE EDUCATION PHASE

Hutchison and Lord (1979, p. 79) have identified four purposes for the education phase of integration:
(1) consumer education about leisure and integration;
(2) advocate, consumer, and parent education regarding their roles in the integration process;
(3) leadership training and in-service education for staff and volunteers; and
(4) participant, peer, and public education.
The following is merely a brief outline of these purposes; the reader is directed to Hutchison and Lord (1979) for a detailed discussion.

(A) EDUCATING CONSUMERS ABOUT LEISURE AND INTEGRATION

Education is a vital part of the integration process because it:

> . strengthens the goal and process of normalization by respecting the needs, age, and dignity of individuals who have a disability.
> . forms a vital link between segregated and integrated programs and between the upgrade and participate phases of the integreation process. This is accomplished by helping people become more aware of their own needs, rights, and potential and more confident in utilizing their skills when becoming involved in the community.
> . helps raise expectations of both disabled and non-disabled people by making available a wide variety of opportunities to meet personal-social needs. (Ibid., p. 80)

The education process enables consumers to:

> . identify needs related to leisure and community involvement.
> . raise expectations through awareness of their needs, rights, and potential.
> . experience small group interactions and problem-solving which support their quest for involvement and social change.
> . clarify values about self, leisure, people, and change.
> . identify and work to overcome barriers to community involvement and integration.
> . develop knowledge and awareness of how to utilize a range of leisure and community resources.
> . choose, experience, and enjoy leisure options.
> . change their lifestyles. (Ibid., pp. 80-81)

A number of strategies can be used to educate consumers for integration and leisure:

> 1. Present leisure and integration concepts to consumers....
> 2. Support individuals in reflecting and acting upon leisure and community concerns within the context of ongoing programs and experiences....
> 3. Utilize a Community Counselling Process....
> 4. Organize and assist consumer groups.... (Ibid., pp. 81-84, passim)

The above points might seem to apply mainly to disabled adults who can take an active part in their own education; however, they apply equally well to children. If children are educated at an early age to use leisure, play, and recreation creatively in the sense of both personal development and the overcoming of disability, then their range of experiences, skills, and knowledge will provide strong preparation for later life, particularly in terms of being aware of individual rights of access to appropriate experiences.

(B) THE ROLE OF ADVOCATES, CONSUMERS, AND PARENTS IN THE INTEGRATION PROCESS

In North America, the consumer needs of the disabled are seldom adequately met, partly because they are often told what they will receive from the providers of services (Edginton and Compton 1975). This kind of paternalism means that most disabled individuals rarely become educated consumers and strong advocates.

> To be an educated consumer requires knowledge, information, and choice. Consumerism in human services also requires that people participate in the planning and decision-making process. Advocacy helps this process by providing support and encouragement for people to seek and demand information about community involvement. Parents, consumers and advocates must serve in an advocacy role with and on behalf of people with disabilities to ensure that a wide variety of leisure opportunities are (sic) made available. In order to do this, understanding and commitment to the concepts underlying advocacy and the integration process must be developed. (Hutchison and Lord 1979, p. 85)

Voluntary advocate associations must, however, develop new roles. Wolfensberger (1973) outlines three stages in the evolution of such associations. In the first stage, there is the direct provision of services (e.g., schools, sheltered workshops, and evening drop-in centres). In the second stage, the associations begin to obtain and utilize community or generic services (e.g., the ending of an association's own segregated recreation programme and the utilization of the community recreation programme). Finally, new priorities emerge during the third stage, e.g., advocacy to promote the needs and rights of the disabled, monitoring community services to ensure they are meeting the needs of consumers, and demonstration projects involving cooperation with

community groups.

Backed by a stong education support base, parents can serve several important roles in the community on behalf of their children. First, they can be advocates emphasizing their children's rights to participate in community activities. Second, they can serve as teachers by working and playing with their children on a variety of developmental activities. Third, they can facilitate the integration process by raising the expectations of other people toward their children (Hutchison and Lord 1979, pp. 88-89; Gorham 1975, p. 253). The formation of parent groups is frequently a useful means of helping parents to fulfill these roles. A primary goal of any parent education programme is to give them the assurance and knowledge that their disabled children do have abilities that can be developed and that they should not over-protect and shelter children from the world. The younger the children are when this parental education begins, the more the children will be able to develop and have a greater probability of leading as normalized a life as possible.

(C) LEADERSHIP TRAINING FOR STAFF AND VOLUNTEERS

Leadership training is required for persons who are responsible for providing both segregated and generic services. There are differences, however, in the objectives of training programmes for these two groups. The objectives for those providing segregated services are:

> 1. to understand and apply the concept of normalization within the segregated setting; i.e. age appropriateness, normalized daily routine, choice for clients, etc.
> 2. to utilize effective principles of developmental programming in order to maximize the upgrading of participants' skills and confidence.
> 3. to understand and apply principles of transfer as part of program development.
> 4. to learn to effectively utilize community resources, both human and physical, which facilitate the integration process. This involves learning how to cooperate with community leisure agencies and voluntary advocate associations to ensure that supports for integration will be provided. (Hutchison and Lord 1979, p. 98)

The objectives for those providing generic services are:

> 1) to develop increased confidence and positive attitudes in working with people who are disabled....
> 2) to gain an understanding of disabilities and handicapping conditions....
> 3) to understand and apply the concept of integration....
> 4) to effectively utilize a variety of supports and adaptations in order to facilitate the integration of individuals.... (Ibid., pp. 100-101)

In each of these cases, the broader goal is to assist staff and volunteers in making leisure experiences more developmental and more physically and socially integrated. Unlike many countries in Europe, however, it would appear that Canada places little emphasis on the education of leaders educated specifically for children's play beyond the broader areas of early childhood education or child development. The majority of the professionals dealing with children's play seem to come from either physical education or recreation backgrounds. In contrast, Britain, for example, provides college-level education for professional play leaders. There would appear to have been no analysis undertaken on the appropriateness of Canadian college- or university-level physical education and recreation programmes for preparing leaders to work with children -- either disabled or non-disabled -- in play settings. In-service training and education programmes should, therefore, be provided. There are various methods which can be used for such programmes; see Hutchison and Lord (1979) for a discussion of several approaches.

(D) EDUCATE PUBLIC, PEERS, AND PARTICIPANTS

Although educating non-disabled children and adults to be more accepting of the disabled can be partially undertaken through public media campaigns, Hutchison and Lord (1979, p. 104) argue that the best way to educate people in general and children in particular about the disabled is during integrated experiences. There is increasing evidence that social interaction within a positive, integrated setting results in non-disabled children and adults becoming more accepting of individual differences, more considerate, and more tolerant (e.g., Bricker 1978; Kleck 1968; Lazer et al. 1978). The potential of play environments for educating non-disabled children about disabilities is apparent.

THE PARTICIPATION PHASE

Participation, the third and final phase of the integration process, is based on the need for a developmental continuum of services, opportunities, and experiences which reflect each of the following concerns:

> 1. There is a large range of ability in any community, including the variability which exists amongst those who have a disability. A continuum of experiences is needed to afford opportunities to members of the community with varying abilities.
> 2. A continuum needs to be developmental so that people can participate and progress at their own stage and rate of development. Experiences in the continuum become stepping stones in the integration process rather than ends in themselves.
> 3. People need opportunities to move from relatively dependent situations to increasingly independent experiences.
> 4. People need a variety of experiences, choice and responsibility, and opportunities to interrelate with non-disabled people. These needs are best met in community and integrated settings. A developmental continuum allows people to move from segregated to more integrated experiences.
> 5. Services for people who are disabled are currently characterized by fragmentation, duplication, scarcity, and lack of coordination. Awareness of a possible continuum enables a community to gain a sense of current services and existing problems. (Hutchison and Lord 1979, pp. 109-110)

This developmental continuum of experiences, as portrayed in Figure 4 above, involves seven types of experiences:

(1) upgrading experiences in institutions;

(2) segregated upgrading experiences in advocate associations;

(3) segregated upgrading experiences in community settings;

(4) upgrading experiences in the community;

(5) integrated experiences in the community with advocacy and support;

(6) integrated experiences in the community with little or no advocacy; and

(7) on-going community involvement. (Ibid., pp. 113-124)

Once again, it would appear that play environments provide excellent opportunities for children to become involved in a continuum of developmental experiences.

It should be evident that the adoption of such a process changes the focus from the simple provision of services as a municipal function to the provision of opportunities which meet the developmental needs of individuals. For such a process to be successful once implemented, however, there must also be an evaluative process which measures the progress of individuals and aids by suggesting areas where changes or improvements could be instituted.

CHAPTER 7: THE STATE-OF-THE-ART OF INTEGRATED PLAY ENVIRONMENTS IN ONTARIO

INTRODUCTION

Based on the literature review presented above, a series of research questions were formulated as the basis for the development of a questionnaire to be administered to personnel in agencies in Ontario dealing with disabled children, integration, and play environments:

(1) Do the play needs of the disabled child vary significantly from those of the non-disabled child? If so, how do they vary?

(2) What are the means by which these needs can be met in formal play environments? In particular, are there any modifications that are necessary in order that formal play environments can be adapted to meet the special needs of the disabled child?

(3) What are the implications of normalization and integration of play environments for both disabled and non-disabled children?

(4) How can the play needs of disabled and non-disabled children be met in integrated/normalized play environments?

(5) What is the "state-of-the-art" of integrated play environments in Ontario?

(6) How can the various institutions involved with integration provide play environments that are better suited to meeting the play needs of both disabled and non-disabled children?

(7) What guidelines can be provided to institutions, administrators, staff, and parents in order to develop an effective programme for the development of integrated play environments?

The questionnaire was designed to serve four basic purposes:

(1) to identify examples of integrated play environments;

(2) to examine the attitudes and levels of knowledge concerning integration among personnel dealing with children, both disabled and non-disabled;

(3) to examine the areas of success and difficulty with existing integrated play environments; and

(4) to discover the reasons why other institutions are not involved in integrated play environments.

A list of respondents and their respective agencies is presented in Appendix B; the questionnaire is presented in Appendix C.

This chapter will describe the results obtained from an analysis of the questionnaire data under the broad headings of the questions noted above. It will be followed with a series of guidelines for the integration of play environments.

A brief note is in order in terms of the nature of the respondents. An attempt was made to contact the person in a particular agency who was responsible for play environments, disabled children, integration and normalization, or planning. The job titles of respondents include: school principal, teacher, park planner or designer, special needs coordinator, playground director, summer play programme coordinator, therapeutic recreationist, parks and recreation director, and programme director. Respondents had educational backgrounds in such diverse fields as: children's art education; community or social work; nursing; teaching; kinesthetics; physiology; physical health and education; recreation; recreation administration; early childhood education; physiotherapy; psychology; and sociology. The vast majority were full-time professional staff. Despite this profile of characteristics, many respondents knew little or nothing about disabilities, play, normalization or integration.

DO THE PLAY NEEDS OF THE DISABLED CHILD VARY SIGNIFICANTLY FROM THOSE OF THE NON-DISABLED CHILD? IF SO, HOW DO THEY VARY?

As could be expected given the nature of the respondents, there was unanimous agreement that play serves important cognitive, social, and physical developmental functions for children in general. The great majority of respondents mentioned one or more cognitive functions, including learning, self-expression, personal growth as an individual, feelings, use of senses, intellect, exploration, relief of boredom, stimulation, creativity, imagination, achievement, risk, and skill development. Responses concerning social development were more vague (e.g., developing social skills, socialization). Only one respondent specifically mentioned increased physical fitness. No respondents provided comprehensive answers which dealt with all three areas of development. Few mentioned that play was fun.

When asked in what ways the play needs of the disabled child varied from those of the non-disabled child, there was virtually unanimous agreement that the basic needs and the importance of the play did not vary. There was recognition, however, that the nature of particular disabilities necessitated adaptations or modifications to the play

environment or the play programme. Responses included: increased accessibility; awareness of mobility difficulties; more emphasis on the development of social skills; more emphasis on skill development and self-confidence building; the provision of age-appropriate experiences; increased staff training and awareness; and an emphasis on ability, not disability. Finally, a number of respondents noted that play was even more important for disabled children than non-disabled ones, because of the lack of experiences available for them, their large amounts of forced "leisure time" and the resultant boredom, the potential of play for individual development, and the potential therapeutic benefits.

WHAT ARE THE MEANS BY WHICH THESE NEEDS CAN BE MET IN FORMAL PLAY ENVIRONMENTS? IN PARTICULAR, ARE THERE ANY MODIFICATIONS THAT ARE NECESSARY IN ORDER THAT FORMAL PLAY ENVIRONMENTS CAN BE ADAPTED TO MEET THE SPECIAL NEEDS OF THE DISABLED CHILD?

In reply to the question concerning what kinds of facilities, services or environments can best meet the play needs of children in general, the respondents provided a wide range of answers. Given the fact that there are only a few adventure playgrounds in Ontario, it is surprising that "adventure playground" was the most frequently-cited response. The most common characteristic cited was "variety," with descriptions including: indoor and outdoor; summer and winter; built environments and natural environments; active and passive activities; various media (e.g., climbing structures, sand, water, hills, swings); large open areas and small intimate ones; places to explore and places to create; individual and group activities; involvement of all senses.

There was virtually unanimous agreement that the same types of play environments that were suited to the play needs of children in general were also suited to the play needs of disabled children. It could be argued, therefore, that a "good" play environment -- one that provided adventure, social interaction, skill development, risk, variety, mastery, etc. -- was inherently suitable for all children. Several respondents did mention certain caveats, but these mostly dealt with accessibility.

The respondents were asked to describe the adaptations that had been made in the play environments for which they were responsible. Many of these modifications can be grouped according to type of disability, while other adaptatis applied more generally to a wider range of disabilities.

(i) Visual Disabilities

(1) the provision of enhanced features (e.g., changes in surface texture to indicate breaks in activity areas, the use of sounds such as falling water, bells, and drums);
(2) the use of a buddy system, with a non-blind child being assigned for schoolyard activities;
(3) training programmes for the teachers to make them aware of the degree to which their facilities and programmes normally are visually-oriented;
(4) the provision of a nature trail for the blind.

(ii) Auditory Disabilities

(1) slightly more playground supervision.

(iii) Orthopedic Disabilities

(1) wheelchair ramps, paths, and curbs;
(2) work tables (for clay, sand, and art play) high enough for wheelchairs;
(3) accessible washrooms;
(4) accessible water fountains.

(iv) Cerebral Palsy

(1) re-design of swings and slides.

(v) Mental Retardation

(1) playroom therapy for severely-retarded children;
(2) more supervision for hyperactive children;
(3) restrictions on participation in some activities (e.g., competitive sports or those demanding high agility levels);
(4) training programmes for leaders and/or the funding of special leaders provided by local associations for the mentally retarded.

(vi) Leadership

(1) a special staff person who monitors programmes for the disabled and provides advice and training for play leaders;
(2) annual training programmes specifically designed for staff dealing mainly with the disabled;
(3) annual training programmes for all staff, including one or more sessions on the disabled;
(4) programme planning which takes the disabled into account;
(5) increased staff/participant ratio;
(6) assignment of junior staff persons or counsellors to each disabled child.

(vii) Selection of Disabled Participants

(1) separate registration programmes for disabled children, in order to become acquainted with them and their parents;
(2) parent interviews to discuss the child's abilities and development.

(viii) Facility Design

(1) centralization of services in one large park in order to make the best use of limited budgets and to maximize the accessibility of the site;
(2) no active programme of design changes, but the re-design of equipment as repairs or replacement are necessary;
(3) specific design changes for play equipment, including wheelchair access onto the equipment, handrails, climbing equipment, etc.

(ix) Transportation

(1) provision of bus transportation when necessary.

(x) Upgrading

(l) segregated upgrading programmes (e.g., swimming).

In summary, most of the adaptations mentioned deal specifically with increased accessibility and improved staff training and leadership. There was relatively little emphasis placed on physical design or re-design, with the exception of children with mobility disabilities.

WHAT ARE THE IMPLICATIONS OF NORMALIZATION AND INTEGRATION OF PLAY ENVIRONMENTS FOR BOTH DISABLED AND NON-DISABLED CHILDREN?

(i) Normalization

Few of the respondents were able to discuss the term "normalization" well until it was defined for them. The exceptions were most frequently representatives of special agencies dealing with particular disabilities, who stated that normalization was the policy of their agencies; several specifically quoted Wolfensberger's work. Respondents from municipal or education agencies were less familiar with the term. Approximately half of the respondents were able to say that normalization was the policy of their agencies (although in only a few cases was the policy a written one), with the remainder being unaware of its policy status.

There was general recognition that normalization was an important condition for the individual development of the disabled and that the younger children were when it started the better the children would be able to develop to their full potential. It was recognized that there are basically two types of disabled persons: those who are born with the disability and those who develop it later through disease or accident. Normalization is important for both types: the former should be given a normalized environment to allow for development to begin as soon as possible; the latter to allow for development to continue with as little interruption as possible resulting from the onset of the disability.

A number of difficulties were mentioned. Several respondents felt that normalization in play environments was suited to most disabled children, with certain exceptions, such as the severely physically or mentally disabled; however, severe behavioural problems could generally be accommodated with sufficient numbers of trained staff. Concern over such difficulties as toilet training and personal care was voiced

by only a few respondents. While many new facilities are totally accessible and many older ones are being retrofitted, accessibility was a concern of many respondents, particularly in terms of wheelchairs, braces, and crutches. There was some concern that financial constraints would make further modifications to existing structures very difficult. Those respondents working with visually-disabled children felt that visual disability alone was not a barrier to normalization; however, ignorance about visual disability created attitudinal barriers. For example, while it is a fact that approximately 75% of visually-disabled children have some sight, many facilities and programmes are not open to "blind" children. Attitudes, ignorance, and misinformation create barriers for many disabled persons.

Social impacts on disabled children were recognized to be major barriers to normalization. Hovering leaders and over-protective parents -- combined with a lack of upgrading opportunities -- can turn a disability into a handicap. Such situations can be overcome to a great extent by well-trained staff using imagination and creativity who are armed with a knowledge of the individual child's needs and abilities and who attempt to involve parents in a positive manner in their child's development.

It was noted above that adventure playgrounds were the most frequently mentioned ideal play environment, despite the small number of such playgrounds in existence in Ontario. In contrast to this generally positive view, a few respondents specifically mentioned that, in their opinion, adventure playgrounds were too dangerous for disabled children. Such an opinion is in direct contradiction to the situation in Great Britain where the Handicapped Adventure Playground Association provides numerous adventure playgrounds for disabled children specifically because they provide "stretching," growing, and testing experiences. Similarly, those respondents having personal experience with disabled children and adventure playgrounds did not see safety as a problem. There would appear to be a need for further staff education on this topic in Ontario.

(ii) Integration

There was a great deal of variation in the understanding of what "integration" meant. A few respondents made reference to some of the basic literature and were able to describe their institution's policy in very clear terms. Others either had a vaguer personal knowledge or were only able to say that

it was the general policy of their institution. In the case of some municipal agencies, respondents stated that it was their institution's policy not to turn away anyone, but that they had had few requests from disabled persons for access to their facilties or programmes; some felt that this situation meant their policy was indeed favouring integration, while others recognized that the lack of encouragement or outreach to the disabled acted as an effective barrier against integration.

An interesting dichotomy between integration and segregation was apparent. Some municipal agencies were not involved in integrated experiences, feeling that it was the duty of special associations to deal with the disabled; others were committed to integration and refused to operate segregated programmes. Similarly, some special associations did not want to operate integrated programmes, arguing that it was their responsibility to provide services directly to the disabled and that they should not get involved with the non-disabled. Others argued that integration was a basic goal, but that it could not occur within their own organizations because such associations are not "normal" environments; therefore, they provided segregated upgrading experiences and worked closely with community agencies who were providing integrated experiences. Several conflicts were described in which, for example, a special association wanted to involve its disabled clients in community-based programmes, but the municipal agency did not feel that it was their responsibility to serve the disabled in either segregated or integrated programmes. It was frequently argued that there should be some form of Ontario Government pressure brought to bear on such municipalities, perhaps in terms of restricting access to funding only to those agencies who provided services for the disabled, as is their legal right.

Some municipalities quite clearly wanted to provide integrated services, but were precluded from doing so by what they perceived to be a lack of funds, accessible facilities, and trained personnel.

There was, therefore, general recognition of the benefits of integration for the disabled, with most doubts being expressed by those respondents with no experience with integration. Those persons who were actively involved in integration were its strongest supporters. As with normalization, there was the view that the younger the child could be put into integrated settings, the greater would be the developmental advantage and the preparation for adulthood; therefore, integrated play environments were the most valuable form of integration. Several respondents mentioned the

importance of segregated upgrading experiences as precursers of integrated ones. Doubts were expressed, however, as to the viability of integrated experiences for severely-disabled children. Other common benefits of integration mentioned included the opportunity to improve social and communication skills; to increase self-worth, self-actualization, confidence, and accomplishment; and to provide a demonstration that could be carried over into other programmes, such as sports and education.

Again, the social and attitudinal barriers received a great deal of attention. Non-disabled children were generally seen as creating few barriers to successful integration; the problem was with adults -- both parents and staff. In part, the fear is of isolation of the children (as, for example, with deaf children who might not be accepted by others involved in community programmes), but the greater fear is for physical harm to the children. The other side of the argument, however, is parents of the non-disabled; several respondents had encountered resistance from these parents when they discovered that their non-disabled children were to be in integrated programmes. While the incidents are undoubtedly isolated ones, respondents told of parents withdrawing their children from programmes out of fears that certain disabilities would be "catching." Such misconceptions, myths, and misinformation are much harder to deal with than the parent who is reluctant to have a non-disabled child in an integrated program out of concern that such programmes will be slower-paced or less interesting and will therefore provide less valuable experiences for their child. Many respondents felt that both public education campaigns and efforts to work closely with parents were necessary.

The opportunity to interact with non-disabled peers received a great deal of mention. One respondent noted that even a bad experience could be useful if it taught a sheltered disabled child what the "real world" is like. The opportunity to learn that non-disabled children were similar in many ways to themselves can help disabled children to put their own situations into perspective and to appreciate their own abilities. For many disabled children, integrated play environments can provide them with some of their first experiences in normalized, non-medical environments.

The number of respondents who mentioned agency staff as being a barrier to integration was somewhat surprising. In part, it was a recognition that many staff were not well-educated about disabilities and how to deal with them. There was also some concern that working with the disabled was more difficult and emotionally-draining than with non-disabled

children and that, given staff shortages, they were simply not prepared for integrated settings. The emphasis in many municipal agencies on using teenage staff to run programmes, particularly in the summer, created situations which could be totally unsuited to handling disabled children adequately. Others expressed the concern that some staff were too geared to such activities as competitive sports that were not suited to disabled children. The administrators of some agencies were seen as being against integration because of a fear of the legal liability problems if an accident did occur. Other agencies were seen as being examples of institutional conservatism, afraid to innovate in any area.

Concerns similar to those expressed with normalization also covered such areas as accessibility, transportation, funding, toilet-training or other special needs (e.g., catheters), and a lack of volunteers to help run programmes.

(iii) Non-Disabled Children

There was a strong feeling that integrated play experiences were positive ones for non-disabled children. The focus was on increased awareness and knowledge and the resultant impact on positive attitudes of acceptance and understanding and on a decreased use of pejorative labels for the disabled. There was even some feeling that learning experiences could spill over to parents and other non-disabled children. Stories were frequently told of non-disabled children wanting to help disabled children, looking out for them, and vying for opportunities to be part of a buddy system. It would appear that, in most cases, initial curiosity and perhaps some negative behaviour soon turns to acceptance.

Very few negative comments were expressed. There was some fear that non-disabled children would sometimes receive less attention than they would otherwise. Another respondent noted that non-disabled children would often interpret for the disabled child if there was a communications problem; while there is obviously a positive interaction in such situations, there is also the negative result that such actions tend to continue the cycle of dependency and sheltering.

HOW CAN THE PLAY NEEDS OF DISABLED AND NON-DISABLED CHILDREN BE MET IN INTEGRATED/NORMALIZED PLAY ENVIRONMENTS?

(i) Introduction

This general question was the focus for a large proportion of the questionnaire. The following sections provide an overview of the responses, as grouped under a number of specific headings.

(ii) Policy

Approximately one-third of the respondents replied that their agency had a formal policy concerning children's play in general and integrated/ normalized play in particular. The feeling was that such a policy provided them with a sense of purpose and official support, without which it would be difficult to justify and implement an integrated/normalized play programme and to deal with day-to-day problems and minor crises. Many other agencies had become aware of integration only recently -- often as a result of the International Year of the Disabled Person, 1981 -- and were not yet at the policy formulation stage, but rather were experimenting with the types of facilities and programmes that best-suited their own particular mandate and environment. Their situation was complicated by the lack of experience and training in working with the disabled in general and in integration in particular. The lack of policy appeared to give such respondents a sense of freedom to experiment on the one hand, but also of a lack of official support on the other. It would appear, therefore, that agencies should develop official policies on play and integration/normalization before attempting to implement a programme; such policies could be tentative and preliminary at first to give personnel a basic position from which to work, but should be made more concrete and directive as soon as possible.

(iii) Administrative Support

Linked to the concern for policy was a feeling that no programme could be successful without the support of the decision-makers -- senior administrators, politicians, and funding agencies. The personnel charged with operating programmes are frequently quite junior in the decision-making hierarchy; without the support of higher levels, it will prove extremely difficult to implement, operate, evaluate, and continue programmes. Based on the notion that the push for innovation rarely comes from within an institution, senior

administrators frequently adopt the status quo -- i.e., segregated services -- because it is the conservative and safe position, with tried-and-true programmes that are usually safe and not likely to lead to legal, political or personnel problems. Such a state of affairs implies that pressure and support for innovative, integrated programmes must come to a great degree from outside the institution, in particular from parents and special agencies.

(iv) Parental and Special Agency Support

As noted above, numerous comments were made concerning parents of disabled children: they are over-protective; they lack information; they lack exposure to integrated settings; and they are frequently so concerned with the other aspects of their child's life (e.g., health, education) that play is relegated to a minor position. If they are to support and encourage integrated play programmes, these parents require education, counselling, and other support services (e.g., transportation).

The parents of non-disabled children frequently lack accurate information and sometimes raise objections about integrated play programmes. They are, of course, merely one part of the wider community. Community education and information campaigns are important in order to change wider-based attitudes, but the parents of non-disabled children require special consideration from staff; they should be provided in advance with adequate information upon which they can make balanced judgements. The danger that must be taken into account, however, is that a little bit of knowledge is a dangerous thing: will such information merely serve to fuel their concerns? This question can be answered only within the specific context of the programme itself. There are, however, certain types of specific information that can easily be disseminated; for example, the problems involved in labelling, myths (e.g., that all blind persons are sightless), the fact that disabilities are not "catching," and the ability of many disabled persons to function quite effectively in normalized settings such as schools. These information problems are obviously much more difficult to deal with when the disabilities involved are severe.

Special agencies (e.g., local associations for particular disabilities and hospitals) can provide important support services that can be vital to the success of a programme, including information, therapeutic advice, design advice, and staff training. Voluntary advocacy associations, consisting

of the disabled themselves and other persons interested in fostering the development of disabled persons, can provide support through demonstration programmes, political lobbying, and advice. The importance of disabled adults acting as role models for disabled children cannot be underestimated.

(v) Staff Training and Leadership

The respondents focussed a great deal of attention on staff training and leadership. All staff should be informed and prepared to deal with the special requirements of integrated programmes. One respondent even mentioned the importance of positive attitudes of the cleaning and janitorial staff when special demands were placed on them. Staff training should begin with basic information on disabilities and on individual needs, differences, and abilities. Specific training programmes should then be instituted, with the co-operation of special agencies, therapeutic recreationists, medical personnel, parents, and perhaps even children. Training must be provided on how to deal not only with disabled and non-disabled children, but also with parents and volunteers who might accompany children to the programmes. (One adventure playground leader, for example, noted that a group of blind children most preferred to play in a rowboat in the middle of a small pond where they were out of reach of the adult volunteers who accompanied them; playground staff frequently had to calm the volunteers who feared that their charges would drown, despite the small size of the pond and the shallow water.)

Staff must realize that working with disabled children can be rewarding, despite initial concerns; however, they must have patience, for it can take time for integration to be successful. Higher staff/participant ratios may be necessary. On the other hand, staff must be trained not to perpetuate the problem of over-protecting and sheltering disabled children; a certain degree of control and discipline is necessary, but rarely more so than with non-disabled children.

(vi) Selection and Evaluation Procedures

Careful selection and evaluation procedures should be implemented for any programme, including the selection of staff. It is to be expected -- or, at least, hoped -- that permanent staff will go through a rigorous hiring and performance evaluation process, but difficulties can arise

with temporary or voluntary staff. Despite the number of staff that may be involved in, for example, a summer playground programme, some effort should be made to select personnel on a rational basis; in contrast, one respondent agency picked the names of summer staff randomly out of a hat. Such staff are frequently teenage students with little training or background in dealing with children, to say nothing of disabled children; the provision of a two or three day training session will do little to prepare them adequately to deal with the many problems to be faced. Volunteers can create many similar problems, but present the added difficulty of dismissing someone who is unpaid and doing something out of the goodness of his/her heart (Gillis 1977). The fact of the matter is simply that all persons are not suited to dealing with children, whatever their abilities. In contrast to this concern, however, is the importance of volunteers in many programmes, not just for financial reasons, but also for the care and skill they can bring.

Several agencies noted that they arranged special interviews or registration procedures for disabled children and their parents. The purpose is not only to gain knowledge of the individual child, but also to provide information to them about the programme. Support services in this selection procedure can be provided by special agencies. In contrast, several respondents stated quite categorically that they did not deal with parents, with most arguing that they simply did not have the time nor the staff resources to spend considerable amounts of time with parents.

An ongoing formal research programme evaluating the effect of integrated play environments for both disabled and non-disabled children was suggested by several respondents.

(vii) Financial Support

Quite simply, money is needed -- for retrofitting of facilities for improved access, extra leaders, transportation, washrooms, water fountains, etc. It is important to note, however, that with the exception of accessibility for mobility-disabled and severely-disabled children, special design features were not a major concern for the respondents except in the sense that high-quality play environments should be provided. Ssuch play environments can suit the needs of both disabled and non-disabled children, without unduly interfering in the development of either group.

(viii) A Continuum of Developmental Opportunities

Many respondents recognized that a continuum of developmental opportunities should be provided, beginning with upgrading services, which might be segregated if necessary. The continuum does not, however, end with playgrounds; other opportunities must be provided for the child who is too old for the playground. Summer day camps, for example, can meet certain needs, but they frequently provide short and isolated experiences; summer residential camps are more intensive experiences with greater potential for learning, but might not be suited to all individuals (Murray and Wilkinson 1975). Games and sports may be appropriate for some individuals. The point is that, if normalization and integration are aimed at the development of the total individual, then they cannot be dead-end experiences.

(ix) Success Through Demonstration

Several respondents noted that integration and normalization will increase only if successful programmes are instituted and made known to others in the field. This requires involvement on the part of staff in their own professional organizations, by making presentations at conferences and being willing to share their experiences.

WHAT IS THE STATE-OF-THE-ART OF INTEGRATED PLAY ENVIRONMENTS IN ONTARIO?

(i) Existing Integrated Play Environments

Generally speaking, the state-of-the-art is very poor. Few truly-integrated play environments and programmes were discovered in the course of the survey. It is recognized that the survey was not comprehensive and that examples of integration were undoubtedly missed, but the information provided by the Ontario Ministry of Culture and Recreation and by the wide network of professionals contacted indicates that a fairly accurate coverage was developed. A wide range of institutions, municipalities, size and nature of programmes, and types of disabilities was examined in the survey. The results indicate a great deal of variation, but no particularly strong patterns emerge -- except in the negative sense that there are very few examples of integrated play

environments in Ontario.

With municipalities, the general pattern is that the larger ones have more integration, probably because there is more demand and there are more special agencies providing services. (It would be enlightening to conduct research on the extent to which parents of disabled children actively choose to locate in certain municipalities or parts of municipalities because of the wider range of facilities available for their children in large municipalities or in particular municipalities because of the presence of an appropriate special agency. Any such trends would have important implications for the nature of integrated services that should be provided by a municipality. Few municipalities, however, appear to have accurate data on the range and number of disabled persons within their jurisdiction.) In several cases, however, adjacent large municipalities have exactly opposite policies. Such differences are probably a function to a great extent of local demand or of administrative support, particularly in the form of one strong, committed middle-level administrator who is interested and concerned. On the other hand, some municipalities have strongly committed their whole leisure delivery system to the disabled and integrated/normalized opportunities.

The notion and degree of integration in municipal parks and recreation programmes varies greatly, as does the style. Some "integrated" programmes have one or two disabled children who happen to drop in ("we serve anyone who comes"), while others have active advertizing programmes and work closely with schools and special agencies. Some have "integrated" programmes with "all ten" of their disabled children in one group (i.e., only physical integration), while others spread the disabled children into all appropriate groups (i.e., both physical and social integration).

As noted above, there is frequently conflict between municipalities and special agencies. Some municipalities want to integrate the disabled, while others want to leave it to the special agencies. Similarly, some special agencies are not interested in providing or even fostering integrated opportunities, seeing themselves as being totally involved in therapy and not at all in recreation. Other agencies are actively involved in serving as a conduit for disabled children into municipal integrated services. Because there is little regulatory compulsion (e.g., requiring cooperation and integration as a precurser to funding from higher levels of government) and much professional jealousy, misunderstanding, and difference of philosophy, it can be seen how easily an

impasse can be created when a municipality and an agency have conflicting views. Those who suffer the most are the children.

While many schools have "special education" classes, few are truly integrated. The special education children usually are virtually segregated from the rest of the school, frequently have separate play areas, and often are not allowed outside for recess and other play periods. In contrast, some schools do have active integrated programmes in the fullest sense of the term. Some deal with specific disabilities (e.g., blind, deaf), while others handle a wide range of disabilities; the degree of integration within the classroom can vary according to the needs and demands of individual children, but the play environments are totally integrated. The play environments, however, are rarely anything special: the usual paved schoolyard, the creative play structure, or the open field. The driving force is the attitude of school officials, teachers, parents, and the community at large.

A wide range of facilties for integrated play were provided by the respondents' agencies: a few adventure playgrounds; creative playgrounds; traditional playgrounds; sports fields; community recreation centres; mobile units; and paved schoolyards. One interesting characteristic is that most agencies provide outdoor integrated play programmes only in the warm weather; only two municipalities (Sudbury and Thunder Bay) have active winter programmes. Research has shown that ignoring the potential of parks during the winter is a very common pattern in Ontario for all uses of urban parks and playgrounds (Wilkinson and Lockhart 1977; Wilkinson et al. 1980, 1981).

(ii) Staff

There is a great deal of variation in the quality and quantity of staff across the Province. In general, the larger the municipality or agency, the larger the staff and the wider their range of expertise. Large institutions have trained professional staff, frequently including therapeutic recreationists or special-needs personnel, who not only can deal with the needs of individual children, but who can also provide training for other staff members, including part-time and volunteer staff. Smaller institutions do not have this range of internal resources and commonly use the services of special agencies for advice, training, and evaluation.

Some institutions make an active effort to recruit staff

with specific education and training in dealing with the disabled; for example, a parks and recreation programme may recruit summer playground supervisors from university or community college programmes in special education or recreation. Others select a random sample of job applicants.

Most municipalities conduct leadership and training programmes, both for professional and temporary staff. The most common type of programme for temporary or summer staff is a 3-4 day programme, which includes information on the disabled; however, it also must deal with every other issue of concern for the staff, including payroll, forms, first aid, legal liability, skill training, etc. In-service sessions for professional staff are usually more focussed and shorter in length, with several being conducted on specific topics over the course of the year. The International Year of the Disabled Person seems to have had a strong impact in terms of in-service training on the disabled.

Some agencies provide a manual for staff with information on all aspects of their jobs, including policy, the nature of disabilities, first aid, public relations, etc. Such a manual seems to provide staff with a sense of security and direction.

An interesting point was made by several respondents -- usually teachers -- with respect to school play settings. It was felt that teachers may be highly-skilled in the area of education and, indeed, perhaps in the area of special education, but that they have little knowledge about "play." Too frequently, play is something that happens before and after school or during recess; the unlucky teachers on schoolyard duty are there simply to maintain discipline and all too frequently aware that they are missing a coffee break or having a shorter lunch period. Such reactions are not unexpected given the difficult job of being a teacher. There would appear, however, to be a great deal of potential for in-service training for teachers about the positive aspects of play. Many teachers, including those with disabled or integrated classes, use the Adventure Playground at Harbourfront in Toronto on a regular basis as a developmental tool for their pupils.

(iii) Selection and Evaluation of Participants

There is a wide range of ways in which agencies "select" participants for programmes. Some advertize throughout the community and merely accept anyone who is interested. Others conduct specific campaigns through extensive advertizing,

schools, special agencies, and voluntary advocacy groups to attract disabled participants. The actual selection procedure ranges from a pro forma registration process to detailed evaluations which require the co-operation of parents, special agencies, schools, and medical personnel. There is not a pattern in the use of such techniques, however, in terms of size or location of the programme, or of the disability concerned.

Similarly, there is a wide variation in the types of evaluation techniques adopted. Some agencies have on-going evaluation processes, including weekly or monthly staff meetings in which participants are discussed and problems aired. A few agencies keep records on each individual participant, including the results of pre-registration home visits and post-programme evaluation. Many also undertake formal evaluations of staff, including the use of such evaluations of summer staff being used in the consideration for future employment.

(iv) Inter-Agency and Community Co-ordination

In addition to working closely with generic special agencies (e.g., local associations for the blind, mentally-retarded, etc.), most agencies dealing with the disabled are involved in some form of inter-agency committee which has the task of co-dinating efforts, avoiding duplication, and organizing in-service education and training. This is frequently backed-up by a community advisory committee consisting of parents and other local citizens; some of these are merely advisory, while others undertake such activities as conducting local needs surveys.

(v) Medical, Safety, and Legal Aspects

Many agencies require that detailed medical information be provided on disabled participants, with some special agencies having their own or volunteer medical staff who conduct evaluations.

In most cases, agencies require their permanent staff to have at least a minimal level of first aid training (e.g., a St. John Ambulance course); others provide in-service courses on such topics as cardio-pulmonary resuscitation. Few, however, provide much more than a one-day first aid course for their part-time or volunteer staff.

Safety was very rarely mentioned as being a major problem; when it was described as a problem, it was usually in speculative terms by respondents with little or no experience. Most accidents were of a minor first aid nature, as is the common pattern for formal play environments in general (Wilkinson and Lockhart 1976). Similarly, few respondents saw legal liability as a problem; many were aware that their agency had sufficient insurance coverage to meet any emergency situation.

(vi) Future Plans

Many of the respondents provided information on ideas and programmes which they would like to implement in the future. A primary interest was increased advertizing of programmes, both through the media (brochures, newsletters, community advertizing) and contact with schools, special agencies, etc. While many of the larger agencies already had special needs co-ordinators, many other agencies wanted to institute such a position in order to deal with publicity, planning, and co-ordination with other agencies. There was considerable interest in providing education programmes for the non-disabled, particularly school children. One agency has an effective programme involving disabled adults (particularly those with disabilities requiring wheelchairs) speaking to children, both disabled and non-disabled.

Some agencies hoped to involve the disabled more in planning and programming. Community liaison groups or special agencies would probably have a great deal to offer to such efforts. An important element providing background data for planning efforts would be a community needs study.

Concerns over improving normalization of facilities and programmes focussed on physical access changes (e.g., ramps, curbs, washrooms, water fountains). A number of agencies are planning to increase segregated upgrading programmes, particularly skating, swimming, and summer day camps. Plans for improving integration were rather more vague, usually in the form of comments on "increasing integration." There was usually a focus on increasing integration for particular disabilities, e.g., blind, mobility disabled, mentally retarded.

There were many plans for improved facilities:
(1) adventure playground;
(2) creative playground;

(3) natural areas (with special reference to the "Washington Environmental Yard" (Moore 1980));
(4) vita parcours (literally, "run for life;" a fitness trail);
(5) integrated performing arts centre;
(6) segregated playground as an upgrading opportunity;
(7) pre-school integrated play programme;
-- an autumn playground programme.
The major barrier to virtually all of these plans is the availability of financial support.

HOW CAN THE VARIOUS INSTITUTIONS INVOLVED WITH INTEGRATION PROVIDE PLAY ENVIRONMENTS THAT ARE BETTER SUITED TO MEETING THE PLAY NEEDS OF BOTH DISABLED AND NON-DISABLED CHILDREN?

(i) Introduction

As a result of the literature search and the interviews, a number of guidelines can be suggested to facilitate the provision of high-quality play environments for both disabled and non-disabled children in integrated settings. These guidelines are in the areas of: philosophy, policy, education, leadership, design, developmental programming, evaluation, and financial support.

(ii) Philosophy of Normalization and Integration

It is suggested that agencies involved with children should adopt a philosophy which views (1) play as serving important developmental functions for both disabled and non-disabled children and (2) normalization and integration as positive normative goals in the provision of play opportunities for all children.

(iii) Policy of Normalization and Integration

From a legal point of view, it is a municipality's responsibility to provide leisure and recreation services for all members of the community, including the disabled. There is no legal requirement, however, that such services be normalized and integrated. Given the reasons cited above concerning the value of normalization and integration for individual development of the disabled and the positive effects on the non-disabled, it is suggested that

municipalities adopt normalization and integration as formal policies. Besides fostering the development of play opportunities, such formal policies will also provide staff with both a mandate and a substantial sense of encouragement to implement them.

It would appear that many municipalities in Ontario do have policies concerning disabled or special populations in general; however, very few have specific policies or sections of the their general policies that refer to disabled children, play, and/or integration. In a recent study of 13 municipalities in Ontario concerning municipal recreation policies and services for disabled people in general, Seabourn (1981a) found that six had policies for special service delivery, five relied on a general policy statement of service for all citizens, and two had no written policy. She (1981a, pp. 34-36) concluded as follows:

> It seems that, at present, the existence of a special policy has had limited influence on the services of the department. The methods for determining needs, developing and implementing services, and liaison with disabled people were quite similar for municipalities with and without special policies. The population size, the size of the municipal recreation department, the general policies and procedures of the department, and the level of enthusiasm of community groups seem to be the most potent influences on the general format of each department's services.
>
> The specialty areas of services were most influenced by the presence of a special policy for recreation services for disabled people. The statement of integration as a goal of the program had the most potential influence for the strategies for service delivery and for disabled people themselves. The other two areas affected by the special policies were the development of volunteer and staff training programs. These may be considered as part of a larger public education program which aims to increase general awareness and acceptance of disabled people.
>
> The municipal policies for recreation services for disabled people may also be examined in terms of the advantages and limitations of legislation or policies....Generally, these policies seem to have addressed the limitations mentioned in the literature. For example, fears of too much government control of recreation services have been met with policies and mechanisms for the involvement of disabled people, and agencies representing them, in the planning and

> development of municipal recreation. Concerns for recognition of the rights and abilities of disabled people have been addressed by the provision of education programs for staff, volunteers, community groups, and the public in general.
>
> The policies studied all seem to have many of the advantages of legislation. They provide a definition of goals and a statement of recreation as an essential service for disabled people and, in some cases, for everyone. The special policies and their resulting programs have attempted to recognize and meet the needs of disabled people for special and regular recreation services. Finally, they have provided a clear statement of philosophy and direction for the staff responsible for provision of services to the disabled.
>
> ...The development of special policies has defined the objectives and mechanisms of providing services for disabled people. The policies are advantageous in that they ensure that recreation will be available and provide guidelines for the municipal staff responsible for them. There has not been any indication of these policies being ineffective because of negative attitudes expressed by non-disabled people or the community in general. In fact, the information seems to show a gradual increase in awareness and understanding of disabled people.

It is suggested that the elaboration of existing policies or the initiation of a policy would be of great advantage to municipal leisure service agencies.

Special agencies dealing with particular disabilities are, of course, under no legal compunctions to adopt such policies. Many agencies, however, have adopted normalization and integration as formal policies and are carrying out such programmes quite successfully. It is true that many special agencies do not see themselves as providing "recreation" services, but are more concerned with medical, therapeutic or educational functions. It is argued that a closer examination of play and its potential for individual development can also be combined with existing programmes to meet these other functions.

(iv) Education

There is a great need for education concerning the nature of disabilities and the potential for disabled persons to

develop their abilities through play experiences. Such education programmes must be directed towards a number of groups: society in general; professional recreation staff; the parents of disabled and non-disabled children; and children, both disabled and non-disabled. With children, it is particularly important to begin the education at as early an age as possible in order to develop positive attitudes for them to carry throughout their lives.

The form that such education should take will vary with the nature of the particular group and the situation, but one must question the effectiveness of such general, wide-scale advertizing campaigns as the International Year of the Child (IYC) and the International Year of the Disabled Person (IYDP). It is not clear to what extent -- if any -- such campaigns have had a positive effect on society's attitudes towards children or the disabled, let alone disabled children. Several respondents commented on the stereotypes created, such as the view that the IYDP's publicity has created a perception for many people that the major disabilities of concern are mobility ones, particularly children requiring wheelchairs, crutches or braces. At least one respondent voiced the opinion that IYDP was restricted to being the "International Year of the Physically Disabled." That aside, it could be argued that it is more fruitful to take action at the community level so that people can see some concrete action being taken.

(v) Leadership

A concern voiced by many respondents was the lack of leaders, in terms of both quantity and quality. Depending on the types of disabilities concerned and the number of children involved, it is true that integrated programmes require a higher staff to participant ratio. In many cases, volunteers can provide needed manpower. It is apparent, however, that quality is equally, if not more important that quantity. A programme with a large number of untrained leaders will probably not have a high chance of success. Following a staff selection process that takes into consideration ability and potential, an in-service education programme should be instituted for all staff, both full- and part-time. Education should be provided on the importance of play, the nature of disabilities, interpersonal relations, skill and development teaching, first aid, and safety and legal aspects. It is particularly important to train volunteers and part-time staff not to hover and be over-protective of disabled children, but rather to let them use their abilities to the fullest extent.

(vi) Design

A primary concern in the provision of play environments for any children is that they be of high quality. (See the section on the design of play environments.) With the disabled, there may be certain modifications that are necessary in terms of equipment or programming, but the most important factor for many disabled children -- particularly those with mobility or severe disabilities -- is that of access. Existing facilities need to be up-graded and retrofitted, while new facilties should be totally barrier-free.

(vii) Developmental Programming

It is suggested that agencies adopt Hutchison and Lord's (1979) model of integration which uses the concept of developmental programming to develop a three-phase process of upgrade, educate, and participate. The focus in such a model is the development of individual abilities to their fullest extent.

(viii) Evaluation

Few agencies have instituted a programme evaluating the progress of individual children. There are, however, exceptions; these agencies interview children and parents (with some including a home visit), provide opportunities for regular staff discussions of individual children, and compile a final report on the child's progress. If the goal of a play programme is individual development and if each child has particular individual abilities, then it appears necessary to undertake such evaluation procedures in order to maximize the value of the experience and to provide the opportunity for the most appropriate further experiences to be made available to the child.

(ix) Financial Support

The adoption of the above guidelines would, of course, require financial support. Given the financial constraints

that are currently prevalent, funds will have to be diverted from other programmes or new sources of funds sought. If it is assumed that most agencies are spending money only on those programmes which do meet real needs, then the diversion of funds from other programmes will prove difficult and controversial. Municipalities in particular, however, must recognize that it is their responsibility to provide services for all members of the community, including the disabled. As the disabled become more vocal, particularly through voluntary advocacy groups, it will become increasingly more difficult for agencies to ignore this responsibility. It would appear, therefore, that additional funding must be sought from other sources. Funds are currently available through the Wintario lottery programme for improving the accessibility of facilities and for providing staff support. It is suggested that such programmes be re-evaluated to see if there are ways that a broader range of support can be provided to agencies dealing with integrated play environments.

CHAPTER 8: DESIGN GUIDELINES

THE GOAL OF PLAY ENVIRONMENT DESIGN

The general goal to strive for in all play environment designs -- especially those concerning disabled children -- is to minimize frustrations caused by inappropriate design, while maximizing opportunities for engagement with a stimulating environment. In order to design an appropriate environment, it is necessary to examine the underlying principles or criteria that are used to develop a design.

DESIGN PRINCIPLES/CRITERIA

As has been noted several times above, a "high-quality" play environment should meet the needs of both disabled and non-disabled children:

> What makes the solution to a play environment for most handicapped children different from one for normal children does not lie in the design criteria, but rather in the execution of the parts so they respond to the particular social and physical needs of the users. In other words, the common bond of childhood is far stronger, and more important in designing play environments, than are the separating aspects of most handicaps. (Shaw 1980, p. 240)

Two sets of design principles or criteria will now be briefly examined; both provide an outline of considerations that should be taken into account in attempting to design a play environment that will adequately meet the play needs of all children, both disabled and non-disabled.

(a) GARY T. MOORE AND URIEL COHEN

Beginning with an exercise to programme and design a play environment for an early education centre for children with exceptional education needs and learning patterns that could not be accommodated in local schools, Moore and Cohen developed a set of 13 "design principles" that were seen not as a concrete list of commandments, but rather as a set of parameters that can be freely supplemented as additional knowledge is discovered or quantified. To accept an idea as a

design principle, the team evaluated it to see if the information would contribute to the provision of better environmental settings for the fulfilment of developmental goals (Moore et al. 1979). In brief, these design principles can be described as follows:

1. CONTINUITY AND BRANCHING. An environment should encourage the play behaviour to flow by providing a choice of options at decision or crossroads places.
2. IMAGEABILITY AND ORIENTATION. An internalized "reading" and understanding based upon the cues provided in a physical design allows the user to understand his location in space.
3. ORDERLINESS AND CONSISTENCY. An orderly visual organization of a physical environment reduces irrelevant stimuli and increases the potential for understanding.
4. PACED ALTERNATIVES. A physical environment should contain a wide variety of challenges to its users, thus providing the opportunity for each child to accomplish some tasks, but be stimulated by more difficult situations to strive for a higher level of development.
5. AMIBIGUOUS TO DEFINED SPACES. A physical environment should provide a range of places from highly defined typological ones (e.g., playhouse) to non-objective, changeable (manipulable) ones which encourage the users to apply their own creative imaginations.
6. VARIETY OF SPATIAL EXPERIENCES. A physical environment should provide the user with a range of spatial experiences, from small, very enclosed spaces to large open ones.
7. RANGE OF SOCIAL SCALE. A physical environment should be designed in such a manner that it allows a variety of interpersonal experiences: from single to large group.
8. RETREAT AND BREAKAWAY POINTS. A large and active social space should be designed to include various paths which provide an easy way out of (into) an ongoing activity. Retreat places, out of the active space but close enough to observe it, should also be provided.
9. REPETITION AND MULTIPLE CODING. A designer should use the redundant cueing of many sensory clues to define elements in the environment. Objects can be coded by colour, shape, texture, even smell and sound to clarify use.
10. CLEAR ACCOMPLISHMENT POINTS. A physical

> environment should be designed in such a way as to allow a child, regardless of disability, to have a feeling of environmental mastery over some portion of that environment.
>
> 11. LOOSE PARTS. A play area should comfortably accept and contain a wide variety of "loose parts," i.e., things that can be manipulated by the user.
>
> 12. EMOTIONAL RELEASE AREAS. Within a play area setting areas should be provided that allow children to express their emotional anxieties.
>
> 13. PLANTS AND CRITTERS. A comprehensive plan for a play-yard should provide opportunities for users to interact with as wide a range of living things as possible. (Shaw 1980, pp. 230-231)

The authors emphasize that not all of these design principles are directly or equally applicable to every design situation. A comprehensive understanding of each unique problem, plus a delineation of the goals of each project, developed with the future users in the initial phases of the design process, should reveal information that will determine a hierarchy of applicability of these design principles.

(b) LELAND G. SHAW

Having designed a number of play environments for disabled children, Shaw (1980) has developed a set of "design criteria" which are in many ways comparable to Moore and Cohen's design principles. (See Figure 9.) These can be summarized as follows:

> 1. SENSE OF PLACE. ...While each part of the area in a play environment forms a place for play to occur on, in, around and through, it is the over-all organization of these parts that creates the stage for the process of play through time and that gives a sense of place to the whole. It infers that the individual parts are not only created to express their specific purpose, but must reflect an over-all order. In other words, it relates to a skeleton which is the framework that accepts the scattered bits of ideas and information and organizes them into a cohesive environmental statement....
>
> 2. UNIFIED ENVIRONMENT. ...Unifying the parts of the play-yard allows activity generated by the highly complex stimulating "star" areas to flow naturally to supporting structures; thus, natural changes in use and variations of play occur. This criterion

FIGURE 9: A Comparison of Shaw's Primary Design Criteria and Moore et al.'s Design Principles

No.	Primary Design Criteria (Shaw)	Design Principles (Moore, Cohen)	No.
1	Sense of Place	Imageability and Orientation	2
		Orderliness and Consistency	3
		Continuity and Branching	
2	Unified Environment	Continuity and Branching	1
3	Variety of Spaces	Ambiguous to Defined Spaces	5
		Variety of Spatial Experiences	6
4	Key Places	Clear Accomplishment Points	10
5	Multiple Paths	Paced Alternatives	4
6	Three-Dimensional Juxtaposition of Parts	Range of Social Scale	7
		Retreat and Breakaway Points	8
		Emotional Release Areas	12
7	Non-Objective Objects and Spaces	Ambiguous to Defined Spaces	5
8	Variety of Material Surfaces	Repetition and Multiple Coding	9
9	Loose Parts	Loose Parts	11
		Plants and Critters	13

Source: Shaw (1980)

reinforces the notion that the whole, when it can be perceived (and hence used) as a whole, is much more stimulating than the isolated parts, which are perceived and used only as parts....

3. VARIETY OF SPACES. ...This will create a range of spaces, from small, very enclosed places highly defined by walls and ceilings, to large open places that lack clear spatial definition. Conversely, there should be large very well-defined spaces and small areas that lack specific spatial definition....

4. KEY PLACES and 5. MULTIPLE PATHS. These two criteria are discussed together because it is very important to establish their interrelatedness....(W)ell-designed play environments should enrich the potential for a variety of activities occurring on different pathways....Key activity areas should usually be located so that their spheres of influence interact at neutral places (natural seams) in the environment....The key activity areas must be resolved in the design to contain multiple methods, or paths to, through, over, under and around. The linking of support peices of the environment to the key areas will begin to do this naturally....

6. THREE-DEMENSIONAL JUXTAPOSITION OF PARTS. ...A truly 3-dimensional play environment becomes a matrix of spaces, platforms and pathways juxtaposed so as to maximize interactions -- physical, verbal and visual....

7. NON-OBJECTIVE SPACE. Playgrounds around the world are littered with abandoned, rusting rocking ducks and lonely, chipped concrete turtles. Adults use very little foresight in foisting these upon children. A lesson should be learned from children's construction. They seldom worry if their ad hoc collection of cardboard boxes and blankets resembles something specific. In fact, what is so nice about a box is that one moment it can be a jail, the next a palace, and later a rocket ship or the insides of whale. The designer should think in terms of spaces as round, square, irregular, regular, bright, dark, big, little, etc....

8. VARIETY OF MATERIAL SURFACES. ...Material surfaces can be coded to specific body movements, for example, covering all similar ramped surfaces with one kind and colour of carpet; while this kind of multiple coding may help a design organize a colour-texture scheme it should not be over-used.

9. LOOSE PARTS. ...There is no question about the fact that every good play environment should contain

> manipulable elements. The variety they provide to the fixed background is critical in making an environment stimulating over time.... (Shaw 1980, pp. 231-239)

Shaw stresses that the specific conditions imposed by each "problem" may lead the designer to stress certain criteria over others, but that they are all important elements to be considered in the development of a design.

DESIGN OBJECTIVES

The next step in the design process is for the designer to examine the particular skills and abilities of the children in question that are to be stressed. Austin and Hayes (1975) provide a brief summary of these for disabled children in general:

a) Gross Motor Development

Definition: The development and awareness of large muscle activity.

Activities: Those involving the use of the whole body; rolling, crawling, walking, skipping, climbing, receiving, and running. Other components of motor skill development, because of their contribution to the the mature pattern of functioning include body awareness, rhythm, and balance.

b) Physical Fitness

Definition: Improvement of general physical condition both physiologically and psychologically.

Activities: Those that increase the degree of strength, flexibility, balance, endurance, speed, co-ordination, cardio-vascular fitness.

c) Sensory-Motor Integration

Definition: The use of sensory information to refine motor activity (motor skills, movement patterns)....

Activities: Balance (static and dynamic) and rhythm (locomotion movement) involving gross and

fine motor movements, laterality (internal awareness that body has left and right sides), directionality (extension of laterality into the external world).

d) Perceptual Motor Skills

Definition: The functional utilization of primary auditory, and visual motor skills, touch and proprioception. Slight imperfections or impairment of any one system can disrupt the whole network and cause extensive imperfection.

Activities: Those developing abilities to receive auditory stimuli, retain and recall information, observe and identify, eye-hand tasks, and the ability to plan an appropriate motor task from information received.

e) Social Interaction Skills

Definition: The skills involved in social involvement and adaption.

Activities: Those encouraging peer group involvement, concession and reception and decision making.

f) Conceptual Skills

Definition: The functional level of concept attainment and general reasoning ability.

Activities: Those encouraging the child to utilize general information through re-organization, simplification, prediction, questionning, synthesizing or systematizing.

g) Emotional Responsiveness

Definition: Expression of feelings appropriate to environment situation.

Activities: Drama, make believe, pantomime, direction, role playing. (Melvin 1980, pp. 26-27)

Once the designer has examined the particular needs of the children concerned with a particular project, these needs can be integrated with the design principles and criteria noted above in order to develop a set of specific design

objectives for the project. Melvin (1980, p. 22) provides a list of general objectives for the design of all play environments which are of particular importance in dealing with disabled children:

1) Access
   . The play environment should be conveniently accessible from adjacent interior and exterior areas.
   . Play facilities should be accessible to all children, within walking distance at the neighbourhood scale.
   . The play environment and facilities (seasonally appropriate) should be accessible for year-round activity.
   . Area should be accessible for emergency and maintenance equipment.

2) Function
   . The environment must function so as to respond to the physical, social, cognitive, creative and individualistic aspects of play of all users.
   . The play environment and facilities must be safe.
   . The play environment should be self-motivating; it should not depend on paid supervision to function properly.

3) Organization
   . The environment should be organized so that it provides non-conflicting areas for the physical, social, cognitive, creative, and individualistic aspects of play.
   . Self-choice rather than compulsion should be stressed in the use of facilities.

4) Quality
   . The play environment should be varied and diverse offering a combination of soft and hard areas and natural and man-made elements for the user to explore and discover and manipulate.

DESIGN GUIDELINES

Melvin (1980) then proceeds to develop a set of design guidelines for play environments for disabled children. While the reader is referred to his excellent work for a full description, the following is a brief summary of his main

points.

(a) SITE SELECTION AND LOCATION

(i) Size

(1) The space should be large enough to allow for physical, social, creative, and quiet retreat play.
(2) The spatial arrangement of the space should be such that it accommodates disabled children both while they are using mobility aids (e.g., wheelchairs, crutches, braces) and while they are not using the aids.

(ii) Micro-Climate

(1) Natural or man-made characteristics should provide protection from prevailing winds.
(2) Shaded areas are necessary, as many disabled children take medicines which increase the rate of dehydration.

(iii) Topography

(1) A flat or mildly-undulating topography is desirable (but slopes should be provided for sliding).

(iv) Access

(1) Neighbourhood play spaces should be within the home range or walking distance of children.
(2) The site should be accessible by a hard-surface, safe route other than a roadway.
(3) Circulation surfaces should be of a hard, non-skid nature (1-2 m wide).
(4) The site should be easily accessible by car, public transit or special transportation for the disabled.
(5) Depending on scale, the site should be easily accessible at the regional, community or local scale.

(v) Existing and Complementary Facilities

(1) Near-by facilities (e.g., athletic areas, zoos, conservatories, bicycle paths, natural areas, trails, museums) can make the trip to the playground both multi-purpose and family-oriented.

(b) SITE PLANNING

(i) Function and Organization

(1) Physical play areas should stress gross-motor development, sensory-motor integration, and physical fitness.
(2) There should be a mix of both equipment which defines play (e.g., swings, slides) and equipment which is open-ended (e.g., creative climbing structures).
(3) The area set aside for physical play should be a large proportion of the site.
(4) Social play opportunities should be mixed with physical play equipment.
(5) There should be a combination of both passive and active social play opportunities.
(6) The creative cognitive play area should contain manipulable materials (e.g., sand, water, "loose parts").
(7) Elements of the natural environment (e.g., plants, animals) may be useful.
(8) Physical play activities should be separated from the creative play area to avoid interruption or interference, but should be visually and physically connected so as not to be too remote.
(9) Areas for individualistic or quiet retreat play should be provided.

(ii) Surfacing

(1) There should be a mixture of hard, variable, and soft surfaces.
(2) While they can create difficulties for children with mobility problems, soft surfaces can cushion falls; sand is a useful play medium.
(3) Although they can create mobility problems, variable surfaces (e.g., brick, stone, wood) can be used to delineate spaces, change of activity or use of a particular area.
(4) Hard surfaces create safety problems, but allow for easy mobility.

(iii) Circulation

(1) In order to ensure disabled children accessibility to all areas, a circulation system using a hard surface material should be provided to provide definite links to facilities while meandering around soft-surfaced play areas.
(2) The circulation system should encourage a "natural" flow between facilties.
(3) Right angles are to be avoided in order to facilitate unimpaired forward motion.
(4) Rest areas should be included in the circulation system
(5) A hierarchy of path sizes and material construction could

be established to delineate the importance and use of areas.
(6) The circulation pattern should be circuitous in order to guide children back to areas where mobility aids might be left.
(7) A circulation system should become a play environment on its own.
(8) The playground circulation system should connect with neighbourhood or community pedestrian routes, but should be separated from vehicular traffic.
(9) The circulation system should provide choice.

(iv) Walks, Slopes, Ramps, Handrails

(1) Walks should be stable and firm, relatively smooth, and of a non-slip surface.
(2) One-way walks should be no less than 1 m wide and two-way walks no less than 2 m.
(3) Walks should be pitched with a continuous cross-slope for water runoff.
(4) Ramp gradients should not be greater than 1:12, with 1:20 being preferable.
(5) Ramp runs should not be greater than 10 m with intermediate platforms not shorter than 1 m and stopping and turning platforms not smaller than 1.7 m square.
(6) Ramps should be provided with handrails at appropriate heights.
(7) Ramps built into play hills should have protective edges.
(8) Landings or platforms should be equipped with protective edging or railings.
(9) For short rises, a slope of 1:7 is permissible with platforms every 5 m.

(v) Fountains

(1) Water fountains of an appropriate design should be provided.

(vi) Entrance

(1) Crosswalks or grade separations should be established where children must cross vehicular streets to gain entrance to playgrounds.
(2) The entrance should orient the child to the various aspects of the environment, either visually or via signs.
(3) Entrances should allow access to emergency and maintenance vehicles.
(4) A drop-off zone should be provided at the entrance for vehicles delivering children.
(5) Protective edging or railings should be provided at entrances to stop children from indiscriminately crossing

streets to gain access to the playground.

(vii) Seating and Observation

(1) Seating areas should be provided where adults or supervisors can view the children.
(2) Rest areas and seating should be provided for the children in locations where they can view the activities of other children.

(viii) Shelter

(1) Shade and all-weather shelters should be provided.
(2) Enclosed, heated play areas should be considered.

(ix) Washrooms

(1) Indoor washroom facilities equipped to handle disabled children should be conveniently accessible.

(x) Plant Materials

(1) Landscaping should blend the playground with the surrounding environment, while providing shade, shelter, elements, spaces for playing and in and around, screens, and an interesting topography.
(2) Areas where children can cultivate plants might be provided.
(3) Plant material should be hardy species which are not harmful to the children.

(xi) Maintenance

(1) Surfaces should be maintained to facilitate wheelchairs and other mobility aids.
(2) Materials that do not require constant replacement should be used.
(3) The community and children should be involved in the upkeep and evolution of the facility.
(4) Trash receptacles should be provided.
(5) Storage areas for maintenance materials and equipment should be provided.

(c) FACILITIES

Facilities should be provided for:
-- sliding: particularly slides down berms or sloped hills;

-- climbing: a variety of levels of difficulty;
-- crawling: for children when not using mobility aids;
-- swinging: a variety of types of swings, including wheelchair swings, hammocks, tires, etc.;
-- bouncing: with safe and soft landings;
-- balancing: both with and without mobility aids;
-- creative cognitive play: sand tables, sand boxes, water play;
-- sensory stimulation: discovery, experimentation, creation, testing, and reasoning involving sound, heat, smell, touch, and sight;
-- social play: court sports, field days, team sports, ball games;
-- winter play: mobility and temperature taken into account;
-- wheeled play: fitness trail, traffic rule games.

(d) CONCLUSION

The design of a high-quality play environment -- for disabled and/or non-disabled children -- is not a simple exercise. It need not, however, be solely the domain of the professional. Both children and adults can aid the professional a great deal in the design process.

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APPENDIX A: SELECTED DEFINITIONS

N.B. Many of the following definitions use the term "handicapped" rather than "disabled." For reasons which are apparent both within the text and the definitions provided below for these two terms, "disabled" is the more preferable term and the one which is becoming more widely-accepted. The reader is cautioned, therefore, to take this concern into consideration when the following definitions are direct quotations.

ADAPTED RECREATION: "Adapted recreational service is the adjustment or modification of the activities, the facilities and/or the programming of community recreational services in any way necessary to enable the handicapped person to participate successfully." (Shivers and Fait 1975, p. 51)

ADVENTURE PLAYGROUND: "...often labelled 'junk' playgrounds, in which children under supervision of trained play leaders are given the opportunity to take part in a variety of self-directed activities (e.g., constructing huts and forts using materials and tools provided at the playground, lighting fires and cooking, camping, keeping animals)." (Wilkinson 1980, p. 17)

ALLERGY: "A hypersensitivity or allergy is a body condition in which there is an exaggerated reaction to certain kinds of foreign substances." (Vannier 1977, p. 127)

ARTHRITIS: inflammation of the joints.

ASTHMA: "...a respiratory disorder which is characterized by shortness of breath, coughing, wheezing, and a choking feeling caused by blockage of the small air passages." (Willard 1978, p. 5)

BLINDNESS: "The 'blind' person has a vision acuity of 20/200 or less. Such an individual may be totally blind in both eyes or in one or barely able to distinguish motion or light....The 'partially sighted' person has visual acuity ranging from 20/70 to 20/200 and can see some light, forms, a few bright colors as well as black and white, and can detect some movements...." (Vannier 1977, p. 53)

CARDIOVASCULAR DISABILITIES: include rheumatic fever, congenital heart defects, hypertensive heart disease, coronary heart disease, and cerebrovascular disease.

CEREBRAL PALSY: is a neurological impairment resulting from brain damage or faulty development of those parts of the brain which control the body's movement "...as a result of a disease, anomoly, or accident before, during, or after birth. Cerebral palsy results in a motor disability that may affect many parts of the body or only a limited group of muscles anywhere in the body. It can cause weakness, lack of coordination, involuntary motions, paralysis, drooling, facial grimaces, and excessive rigidity or body stiffness, depending upon the severity and location of brain damage." (Vannier 1977, p. 44)

CONCEPTUAL SKILLS: the functional level of concept attainment and general reasoning ability (Austin and Hayes 1975).

CREATIVE PLAYGROUND: "...a formal playground characterized by apparatus that is designed and created from materials which are more 'natural' (e.g., wood, stone, brick, hills) (than in a traditional playground). It is 'creative ' in the sense of using more natural materials while at the same time attempting to offer a wider choice and range of alternatives by means of more abstract design." (Wilkinson 1980, p. 17)

CYSTIC FIBROSIS: "...the mucus glands in the lungs and/or digestive system produce abnormal, thick, gluey mucus. The exact cause for this inherited disease is unknown, and there is no known cure....Children with this disease have little resistance to respiratory infections such as pneumonia and bronchitis....(T)he body does not get the normal nourishment from food, and severe malnutrition may occur." (Willard 1978, p. 17)

DEAFNESS: "...that point where normal auditory communication is nearly or totally impossible." (Davis 1960, p. 81)

"The 'hard of hearing' can hear enough to learn how to speak and may or may not wear a hearing aid. Those classified as 'deaf' (from birth) cannot hear or speak unless taught to do so by a speech specialist. 'Hearing acuity' is measured in tone or pitch and 'intensity' by decibels." (Vannier 1977, p. 59)

DEVELOPMENTAL PROGRAMMING: the adherence to a process which enhances the learning and development of participants. It assumes that people develop and learn at different rates; therefore, the focus is on the individual as a developing human being (Hutchison and Lord 1979).

DIABETES: "...is an inherited disease caused by the malfunctioning of the insulin-secreting cells in the pancreas; the body is thereby robbed of a major source of energy. Mild

cases can be controlled by diet and exercise; more serious cases are controlled by daily injections or oral consumption of insulin. The disease is incurable but controllable." (Vannier 1977, p. 120)

DISABLED: "'Individuals who are disabled' refers to individuals who because of impairments are limited or restricted in executing some skills, performing tasks, or performing certain activities, movements or patterns. The disability may be the result of the impairment or defect to a bodily organ or member. Disability usually refers to the sense organs and/or organs of execution such as arms, legs and tongue but may also be due to mental impairment.

"'Individuals who are handicapped' refers to individuals who because of disabilities are adversely affected psychologically, emotionally, or socially. It reflects an attitude of self-pity and despair or perhaps a realistic assessment of the social or physical barriers imposed by society which magnify and existing disability.

"Thus, a disability is a state or condition which may or may not be reversible, and which implies realistic limitations on functioning. A handicap is an artificial condition imposed by the individual himself or society, which tends to expand or magnify unnecessarily the realistic limitations of a disability. In other words, the disabled need not be handicapped." (Witt 1976, p. 5, following Gunn 1975)

EMOTIONAL RESPONSIVENESS: expression of feelins appropriate to environment situation (Austin and Hayes 1975).

EPILEPSY: "...is a symptom of a brain disorder, consisting of seizures (also called convulsions)....Medication may completely control the seizures, or may only reduce the number and frequency." (Willard 1978, pp. 24-25)

GROSS MOTOR DEVELOPMENT: the development and awareness of large muscle activity (Austin and Hayes 1975).

HANDICAPPED: see "DISABLED."

INTEGRATION: "...the opposite of segregation; and the process of integration (consists) of those practices and measures which maximize a person's (potential) participation in the mainstream of his culture." (Wolfensberger 1972, pp. 47-48)

LEARNING DISABILITY: "...covers a specific group of children who have a wide range of learning problems. They have average to above average intelligence, but are not functioning at that level because of perceptual, conceptual or motor difficulties....(It) does not include learning problems

resulting primarily from mental retardation, visual, hearing or motor handicaps, emotional disturbances or environmental disadvantage. The common element to all learning disabled children is their difficulty learning." (Willard 1978, p. 31)

MAINSTREAMING: a term often used as a synonym for "integration," particularly in the United States.

MENTAL ILLNESS: There is no universally-accepted definition of what constitutes mental illness or emotional disturbance. These are broad terms which cover a wide variety of conditions: functional psychoses, organic conditions, mental deficiency, conduct disorders, psychoneuroses, and psychosomatic disorders (Vannier 1977, p. 89).

MENTAL RETARDATION: "The mentally retarded are children or adults, who as a result of inadequately developed intelligence, are significantly impaired in their ability to learn and adapt to the demands of society." (United States President's Panel on Retardation, quoted in Willard 1978, p. 37)

MUSCULAR DYSTROPHY: "an inherited disease characterized by gradual weakening and wasting away of the muscles." (Willard 1978, p. 41)

NORMALIZATION: "Utilization of means which are as culturally normative as possible, in order to establish and/or maintain interpretations, personal behaviours and characteristics which are as culturally normative as possible." (Wolfensberger 1972, p. 28)

ORTHOPEDIC DISABILITIES: "...some are easily detectable, others are not quickly recognized. Some persons are born minus a hand or fingers; some have deformities of the head or trunk; some walk with the aid of crutches; others are pushed or propel themselves in wheelchairs....Orthopedic disabilites involve varying degrees of seriousness, and the causes are varied. Some are relatively simple to treat, such as round shoulders; some are chronic and debilitating, such as certain types of arthritis; still others are permanent and incurable, such as spina bifida....(W)e include...any defects that involve bones, joints, and muscles." (Vannier 1977, p. 64)

The disability itself inhibits the performance of normal movements. More specifically, motor performance can be slower, less free and co-ordinated; balance can be poorer; and the functioning strength of the limbs may be decreased (Hunt 1955, p. 106).

PERCEPTUAL MOTOR SKILLS: the functional utilization of

primary auditory and visual motor skills, touch, and proprioception (Austin and Hayes 1975).

PHYSICAL FITNESS: improvement of general physical condition both physiologically and psychologically (Austin and Hayes 1975).

PLAYGROUND: a formal play environment, "formal" in the sense of being an area designated specifically for children's play by a private or public agency or institution; see also "ADVENTURE PLAYGROUND," "CREATIVE PLAYGROUND," and "TRADITIONAL PLAYGROUND."

REHABILITATION: "...is the provision of a variety of specific services to those who have special needs....The intent of rehabilitation is to maximize individual potential by offering ego support and supplying pertinent kinds of assistance, such as instruction, training, socialization and medical treatment.

"Rehabilitation is a personalized process which attempts to minimize or obliterate the effects of any disability and its residual potential handicap while simultaneously making possible the optimal restoration of the disabled person." (Shivers and Fait 1975, p. 195)

SENSORY-MOTOR INTEGRATION: the use of sensory information to refine motor activity (motor skills, movement patterns) (Austin and Hayes 1975).

SOCIAL INTERACTION SKILLS: the skills involved in social involvement and adaption (Austin and Hayes 1975).

SPINA BIFIDA: "literally means 'split spine;' it is a congenital defect in the development of the spine. Its cause is not known and there are many degrees of severity." (Willard 1978, p. 45)

THERAPEUTIC RECREATION: "Therapeutic recreational service is the provision of activities which are prescribed and adapted to meet an individual's limitations or restrictions imposed by some mental, emotional, social or physical disability or disease....It is therapeutic in the sense that there is directed or purposive intervention in the individual's behavior in order to achieve a predetermined objective. Assisting the client in a more rapid rehabilitation or recuperation is the process's single most important goal. There is also the positive objective of providing recreational skills and experiences which permit the individual to have a more satisfying life within the community or treatment center." (Shivers and Fait 1975, p. 1)

TRADITIONAL PLAYGROUND: a generally-flat site with either a sandy or hard surface containing apparatus of "traditional" design, in the form of swings, slides, climbing bars, teeter-totters, etc. The apparatus is usually fixed in position and is constructed out of heavy steel and iron pipes.

TRANSFER: occurs when a person learns a skill, concept or behaviour in one setting and then is able to apply it in another situation (P. Hutchison 1975).

VISUAL DISABILITY: See "BLINDESS."

APPENDIX B: CONTACTS

The following list of agencies and individuals does not include those agencies and individuals who were contacted, but who were not involved with disabled children, play, or integration.

BRAMPTON

Carol Ann Hearns, Recreation Supervisor for Special Groups, Brampton Department of Parks and Recreation

BRANTFORD

Debbie Vanelslander, Special Needs Coordinator, Brantford Department of Parks and Recreation

BURLINGTON

Sharon Bonnello, Special Needs Programmer, Burlington Department of Parks and Recreation

CAMBRIDGE

Gulie Bugry, Special Services Coordinator, Cambridge Department of Parks and Recreation

Tom Smith, Coordinator of Development, Cambridge Department of Parks and Recreation

Wayne Taylor, Superintendent of Community Services, Cambridge Department of Parks and Recreation

DUNDAS

Noel Minich, Dundas Department of Parks and Recreation

KITCHENER

Laurie Gove, Special Needs Coordinator, Kitchener Department of Parks and Recreation

Murray McKinnon, Vice-Principal, Smithson Junior Public School, Kitchener Board of Education

Jerry Steinman, Principal, Smithson Junior Public School, Kitchener Board of Education

Swain Van Camp, Kitchener Board of Education

LONDON

Douglas Spiro, Special Services Supervisor, Recreation Department, London Public Utility Commission

MARKHAM

Heather Leslie, Recreation Programmer, Markham Department of Parks of Recreation

METROPOLITAN TORONTO

Nick de Giorgio, Summer Day Camp Supervisor, Scadding Court Community Centre
Virginia Fraser, Supervisor of Special Programmes, Etobicoke Parks and Recreation Service
John Graham, Principal, Hollywood Public School, North York Board of Education
John Gullick, Director of Recreation Programming, Bloorview Children's Hospital
Cathy Hunt, Recreation Supervisor, East York Recreation Department
Ian Hunter, Supervisor, Design Department, Toronto Board of Education
Diane Jackson, Supervisor of Services for the Disabled, North York Department of Parks and Recreation
Michelle Johnson, Adventure Education Concept (Harbourfront Adventure Playground)
Michael Jones, Designer, Toronto Board of Education
Marsha Lenglett, "Parents of Wilkinson Public School" Association
Patricia Lock, Manager of Community Services, City of Toronto Department of Parks and Recreation
Ellen Lustry, Resource Person, Integration Resource Person, Metropolitan Toronto Association for the Mentally Retarded
Beth MacDonald, Community Liason Supervisor, Ontario Society for Crippled Children
Grace MacFarlane, Metropolitan Toronto Association for the Mentally Retarded
Robert Martin, Assistant Area Supervisor, Schools for the Retarded, Metropolitan Toronto School Board
Pamela McGwigan, Planner, Toronto Department of Parks and Recreation
Neil Melman, Landscape Architect, York Department of Parks and Recreation
Saul Olyan, Summer Program Co-ordinator, Canadian National Institute for the Blind
Karen Oster, Co-ordinator, Play and Learn Centre
Mary Percy, Recreation Supervisor, Etobicoke Parks and Recreation Service
Murray Powell, Assistant Supervisor of Recreation, Canadian National Institute for the Blind
Dorothy Rankin, Manager of Recreation Education, Harbourfront School by the Water, Harbourfront Corporation
Harriet Simmons, Planner, Toronto Planning Department
Heather Snell, Assistant Director of Recreation, Ontario Centre for Crippled Children

Ann Shugard, Therapist, Sunnyview School, Toronto Board of Education
Terry Smith, Supervisor of Services to the Disabled, York Department of Parks and Recreation
Nick Tucci, Vice-Principal, Metropolitan Toronto School for the Deaf
Stanley Walton, Supervisor of Special Service, Scarborough Department of Parks and Recreation
Graham Ward, Programme Director, Variety Village Sports Training and Fitness Centre
Clara Wills, Co-ordinator, Adventure Place, Faywood Public School, North York Board of Education

MISSISSAUGA
Gary Birch, Supervisor of Youth Service, Mississauga Parks and Recreation Department
Diane Thompson, Executive Director, Credit Valley Treatment Centre

NEPEAN
Lorna Evans, Recreation Supervisor, Special Services, Nepean Department of Parks and Recreation
Mary Lynn McKay, Recreation Supervisor, Special Services, Nepean Department of Parks and Recreation

NEWMARKET
Virginia Harrison, Program Director, Newmarket Department of Parks and Recreation
Diane Humeniuk, Newmarket

NORTH BAY
Cathy Seguin, Special Populations Supervisor, North Bay Department of Parks and Recreation

OAKVILLE
Alison Jenkins, Recreation Instructor, Oaklands Regional Centre for the Retarded
Frances Mortiaboys, Recreation Co-ordinator for Special Needs, Oakville Department of Parks and Recreation

OTTAWA
Joseph Pavis, Young Men's/Young Women's Christian Association, Ottawa
Sue Potter, Supervisor, Programmes for Disabled Persons, Ottawa Department of Parks and Recreation

RICHMOND HILL

Lynn Olsen, Supervisor, Summer Programme, Richmond Hill Department of Parks and Recreation

SARNIA

Ted Wood, Director of Recreation, Sarnia Department of Parks and Recreation

SAULT STE. MARIE

Deborah Vesala, Supervisor, Recreation Assistance for Persons with Handicaps, Sault Ste. Marie Department of Parks and Recreation

SUDBURY

Lorne Daley, Co-ordinator of Special Services, Sudbury Department of Parks and Recreation

THUNDER BAY

Douglas Mayer, Supervisor of Special Services, Thunder Bay Department of Parks and Recreation

WATERLOO

Ken Pflug, Head of Community Services, Waterloo Department of Parks and Recreation

Tom Litwill, Playground Programmer, Waterloo Department of Parks and Recreation

WINDSOR

Ross Byron, Executive Director and Principal, Children's Rehabilitation Centre of Essex County

Cecilia Southward, Supervisor of Special Services, Windsor Department of Parks and Recreation

YORK REGION

Sue Mosten, Supervisor, York Region Health and Social Services Department

Noreen Seaborn, Manager, Community Support Services, York Regional Association for the Retarded

APPENDIX C: QUESTIONNAIRE

The following is the (space-compressed) questionnaire used in the study. All interviews were conducted by telephone or in person by a single interviewer. Interviews lasted between one and three hours. Site visits were conducted at a ten sites following the interviews.

INTEGRATED PLAY ENVIRONMENTS FOR THE DISABLED CHILD

ORGANIZATION
Name:
Address:
Telephone:
Contact Person -- Name:
Title:
Description of Position:
Source of Contact:

TYPE OF SERVICE PROVIDED
Sector (private, public, profit/non-profit, voluntary):
Source of funding (government, charitable, fees):
Facilities (number, size, type, location, etc.):
Staff (number, paid/voluntary, qualifications, etc.):
Services:
Clientele (number, disabled/non-disabled, age, sex, etc.):

PLAY ENVIRONMENTS
Detailed description (indoor/outdoor, type, number, size, design, construction, etc.):
Changes/modifications for disabled children (design, construction, location, leadership/training, programmes, etc.):
Changes/modifications for non-disabled children:
Leadership/training:
Integration:
Selection of disabled children:
Selection of non-disabled children:
Programmes:
Problems:
Evaluation techniques and processes:

POLICY
Normalization:
Integration:
Play:
Staff-agency co-operation:
Inter-agency co-operation:

PLAY
What is your own personal background/experience? (education, jobs, play, disabilities, integration, etc.)
In what ways is play important for children in general?
What kinds of facilities, services, or environments can best meet the play needs of children in general? (indoor, outdoor; games, sports; traditional, creative, adventure; etc.)
In what ways do the play needs of the disabled child vary from those of the non-disabled child?
What kinds of facilities, services, or environments can best meet the play needs of disabled children? (indoor, outdoor; games, sports; traditional, creative, adventure; etc.)
Is normalization of play environments for disabled children important, desirable, possible?
    (a) the disability you deal with:
    (b) other disabilities:
What are the problems associated with normalization of play environments?
Is integration of play environments for disabled children important, desirable, possible?
    (a) the disability you deal with:
    (b) other disabilities:
What are the problems associated with integration of play environments?
What are the advantages/disadvantages of integration of play environments for:
    (a) the disabled children you deal with:
    (b) other disabilities:
    (c) non-disabled children:
What are the barriers to integrated play environments? (leadership, cost, institutional, design/construction, legal, safety, medical, citizen interest/involvement, etc.)
What kinds of changes are required for integration to increase?
Do you think that integration of play environments will increase?
    (a) for your organization:
    (b) for other organizations:

SUPPORT CONSULTATION SERVICES USED BY THE ORGANIZATION
Disabilities:
Medical:
Safety:
Legal/liability:
Play:
Architecture/landscape architecture:
Leadership:
Organizational:

EDUCATION/INFORMATION SYSTEMS
(Type, reasons why/why not?, benefits/costs, problems, changes needed)
Staff:
Parents of disabled children:
Parents of non-disabled children:
Disabled children:
Non-disabled children:
Community:
Other organizations:

FUTURE PLANS OF ORGANIZATION (planned, designed)
Play environments:
Normalization:
Integration:
Leadership:
Information/education:
Other:

COMMENTS

OTHER POTENTIAL CONTACTS